FINAL • JUNE 2011

Historic Downtown Upland Specific Plan

ENVIRONMENTAL IMPACT REPORT

Prepared for:
City of Upland

Prepared by:
RBF Consulting

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FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN

SCH NO. 2009111055

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SECTION 12.0
Mitigation Monitoring Program

Section 12.0
MITIGATION MONITORING PROGRAM

Sections 1.0 and 5.0 of this EIR identify the mitigation measures that will be implemented to reduce the impacts associated with the Historic Downtown Upland Specific Plan Project. The California Environmental Quality Act (CEQA) was amended in 1989 to add Section 21081.6, which requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in Section 21081.6 of the Public Resources Code,

> *. . . the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment.*

Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the EIR.

The mitigation monitoring table below lists those mitigation measures that may be included as conditions of approval for the project. These measures correspond to those outlined in Section 1.0 and discussed in Section 5.0. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. Individual project developers and/or the City of Upland will have the responsibility for implementing the measures, and the various City of Upland departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

Section 12.0
MITIGATION MONITORING PROGRAM

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HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT MITIGATION MONITORING PROGRAM							
	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
AESTHETICS/LIGHT AND GLARE							
AES-1	For future development located in proximity to residentially zoned properties, as deemed necessary by the City's Community Development Director, prior to issuance of the Grading Permit, construction documents shall include language that requires all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged within the project site. Staging areas shall be screened from view from residential properties. Construction worker parking may be located off-site with prior approval by the City; however on-street parking of construction worker vehicles on residential streets shall be prohibited. Vehicles shall be kept clean and free of mud and dust before leaving the development site. Surrounding streets shall be swept daily and maintained free of dirt and debris.	Prior to Issuance of Grading Permit/Periodic Site Inspections	Issuance of Grading Permit/ Ongoing During Construction	City of Upland Planning Division/City of Upland Public Works Department			
TRAFFIC AND CIRCULATION							
TR-1	8th Street/Campus Avenue – The City shall monitor traffic growth at the intersection of 8th Street and Campus Avenue on an ongoing basis, in order to determine timing for implementation of the improvements necessary to maintain a LOS D or better. Based on the ongoing monitoring, the City shall design and install a traffic signal at the intersection when warranted.	Ongoing Monitoring of Intersection Operation	Installation of a Traffic Signal When Warranted	City of Upland Public Works Department			

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	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
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TR-2	Foothill Boulevard/San Antonio Avenue – The City shall monitor traffic growth at the intersection of Foothill Boulevard/San Antonio Avenue on an ongoing basis, in order to determine timing for implementation of the improvements necessary to maintain a LOS D or better. Based on the ongoing monitoring, the City shall design and construct a right-turn lane and/or other improvements that would effectuate commensurate benefits when warranted.	Ongoing Monitoring of Intersection Operation	Construction of a Right-Turn Lane and/or Other Improvements When Warranted.	City of Upland Public Works Department			
TR-3	Foothill Boulevard/Euclid Avenue – The City shall monitor traffic growth at the intersection of Foothill Boulevard/Euclid Avenue on an ongoing basis, in order to determine timing for implementation of the improvements necessary to maintain a LOS D or better. Based on the ongoing monitoring, the City shall design and construct a right-turn lane and/or other improvements that would effectuate commensurate benefits when warranted.	Ongoing Monitoring of Intersection Operation	Construction of a Right-Turn Lane and/or Other Improvements When Warranted	City of Upland Public Works Department			
TR-4	I-10/Eastbound Ramps/Euclid Avenue – Prior to issuance of building permits, developers shall pay the applicable Street and Traffic Facilities Development Impact Fee.	Prior to Issuance of Building Permits	Payment of Street and Traffic Facilities Development Impact Fee	City of Upland Planning and Building and Safety Divisions			

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT MITIGATION MONITORING PROGRAM					Verification of Compliance		
	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	**Monitoring Agency**	**Initials**	Date	**Remarks**
TR-5	8th Street/2nd Avenue – The City shall monitor traffic growth at the intersection of 8th Street/2nd Avenue on an ongoing basis, in order to determine timing for implementation of the improvements necessary to maintain a LOS D or better. Based on the ongoing monitoring, the City shall design and install a traffic signal at the intersection when warranted.	Ongoing Monitoring of Intersection Operation	Installation of a Traffic Signal When Warranted	City of Upland Public Works Department			
TR-6	7th Street/2nd Avenue/I-10 Off Ramp – The City shall monitor traffic growth at the intersection of 7th Street/2nd Avenue/I-10 Off Ramp on an ongoing basis, in order to determine timing for implementation of the improvements necessary to maintain a LOS D or better. Based on the ongoing monitoring, the City shall design and install a traffic signal at the intersection when warranted.	Ongoing Monitoring of Intersection Operation	Installation of a Traffic Signal When Warranted	City of Upland Public Works Department			
AIR QUALITY/GREENHOUSE GAS EMISSIONS							
AQ-1	Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:	Prior to Issuance of any Grading Permit/ Periodic Site Inspections	Issuance of Grading Permit/ Ongoing During Construction	City of Upland Public Works Department			

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT MITIGATION MONITORING PROGRAM							
Mitigation Measure		Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
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	• All active portions of the construction site shall be watered twice daily to prevent excessive amounts of dust; • On-site vehicle speed shall be limited to 15 miles per hour; • All on-site roads shall be paved as soon as feasible, watered twice daily, or chemically stabilized; • Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible; • All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; • Track-out devices shall be used at all construction site access points; and • All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.						

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MITIGATION MONITORING PROGRAM							
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AQ-2	All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, the Applicant shall demonstrate to the City of Upland how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).	Prior to Issuance of any Grading Permit/ Periodic Site Inspections	Issuance of Grading Permit/ Ongoing During Construction	City of Upland Public Works Department			
AQ-3	The following measures shall be implemented to reduce ROG emissions resulting from application of architectural coatings: • Contractors shall use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent; • Use required coatings and solvents with a ROG content lower than required under Rule 1113; • Construct/build with materials that do not require painting; and • Use pre-painted construction materials.	Periodic Site Inspections	Ongoing During Construction	City of Upland Public Works Department			

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AQ-4	Prior to issuance of any Grading Permit, the Director of Public Works and the Building Official shall confirm that the Grading Plan, Building Plans and specifications stipulate that, in compliance with SCAQMD Rule 403, ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.	Prior to Issuance of any Grading Permit/ Periodic Site Inspections	Issuance of Grading Permit/ Ongoing During Construction	City of Upland Public Works Department			
AQ-5	Proposed developments within the Upland Downtown Specific Plan shall include, to the extent feasible, as a part of construction and building management contracts, the following measures: • All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters. • All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping. • All residential, commercial, and industrial structures shall be required to incorporate light colored roofing materials.	Prior to Issuance of Building Permits	Verification by City that Measures are Included in Construction and Building Contracts/ Issuance of Building Permits	City of Upland Planning and Building and Safety Divisions			

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AQ-6	Future development projects within the project area that include employers with 250 employees or more shall comply with SCAQMD Rule 2202, which requires the implementation of employee commute reduction programs.	Prior to Issuance of Certificates of Occupancy	Verification by City of Commute Reduction Programs	City of Upland Planning Division			
AQ-7	The following is a list of potential design features that shall be incorporated, as determined feasible by the Applicant in consultation with the Community Development Director, into the Specific Plan and future projects to ensure consistency with adopted statewide plans and programs. Applicants shall demonstrate the incorporation of project design features prior to the issuance of building permits. *Energy Efficiency* • Design buildings to be energy efficient, above Title 24 requirements. • Install efficient lighting and lighting control systems. Site and design building to take advantage of daylight. • Use trees, landscaping and sun screens on west and south exterior building walls to reduce energy use. • Install light colored "cool" roofs and cool pavements. • Provide information on energy management services for large energy users. • Install energy efficient heating and cooling systems, appliances and equipment, and control systems.	In Conjunction with Development Applications and Prior to Issuance of Building Permits	Verification by City of Incorporation of Project Design Features/ Issuance of Building Permits	City of Upland Planning and Building and Safety Divisions			

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• Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting. • Limit the hours of operation of outdoor lighting. *Renewable Energy* • Install solar panels on carports and over parking areas. • Use combined heat and power in appropriate applications. *Water Conservation and Efficiency* • Create water-efficient landscapes. • Install water-efficient irrigation systems and devices, such as soil moisture based irrigation controls. • Design buildings to be water-efficient. Install water-efficient fixtures and appliances. • Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff. • Restrict the use of water for cleaning outdoor surfaces and vehicles. • Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically						

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reduce the need for energy-intensive imported water at the site). • Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project. • Provide education about water conservation and available programs and incentives. *Solid Waste Measures* • Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). • Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas. • Provide education and publicity about reducing waste and available recycling services. *Transportation and Motor Vehicles* • Limit idling time for commercial vehicles, including delivery and construction vehicles. • Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading						

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	and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides. • Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems. • Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). • Promote "least polluting" ways to connect people and goods to their destinations. • Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments. • Incorporate bicycle-friendly intersections into street design. • For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking). • Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.						

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NOISE							
NOI-1	To reduce noise impacts due to construction, project applicants shall require construction contractors to implement a site-specific noise reduction program, subject to City review and approval, which includes the following measures, ongoing through demolition, grading, and/or construction: • Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.	Periodic Site Inspections	Approval of Noise Reduction Program/ Ongoing During Construction	City of Upland Building and Safety Division			

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	• Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporated insulation barriers, or other measures to the extent feasible. • If feasible, the noisiest phases of construction shall be limited to less than 10 days at a time.						
NOI-2	Prior to the issuance of each grading permit, project applicants shall submit to the City Building and Safety Department a list of measures to respond to and track complaints pertaining to construction noise, ongoing throughout demolition, grading, and/or construction. These measures shall include the following: • A procedure and phone numbers for notifying the City Building and Safety Department staff and Upland Police Department (during regular construction hours and off-hours); • A sign posted on-site pertaining the permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);	Prior to Issuance of Grading Permits/ Periodic Site Inspections	Issuance of Grading Permits/ Ongoing During Construction Activities	City of Upland Building and Safety Division			

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• The designation of an on-site construction complaint and enforcement manager for the project. The manager shall act as a liaison between the project and its neighbors. The manager's responsibilities and authority shall include the following: - An active role in monitoring project compliance with respect to noise; - Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers; - Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and - Intervening or discussing mitigation options with contractors. • Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and • A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.						

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NOI-3	If pile driving is required for building construction, construction contractors shall incorporate the following additional requirements: • Wherever possible, sonic or vibratory pole drivers shall be used instead of impact pile drivers (sonic pile drivers are only effective in certain soils). • Engine and pneumatic exhaust controls on pile drivers shall be required as necessary to ensure that exhaust noise from pile driver engines are minimized to the extent feasible. • Where feasible, pile holes will be pre-drilled to reduced potential noise and vibration impacts. • Occupied residences within 500 feet of pile driving activities shall be notified of pile-driving activities at least two weeks prior to the commencement of pile driving.	Periodic Site Inspections	Ongoing During Construction	City of Upland Building and Safety Division			
NOI-4	In conjunction with the submittal of development applications or a building permit application, whichever occurs first, in the project area for a residential structure within 500-feet of the San Bernardino Line, a detailed acoustical study using architectural plans shall be prepared by a qualified acoustical consultant and submitted to the Community Development Department. This report shall describe and	Upon Submittal of Development Applications or Building Permit Applications	Submittal of Acoustical Study/ Issuance of Building Permits	City of Upland Planning and Building and Safety Divisions			

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	Mitigation Measure	**Monitoring Timing/Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	Initials	**Date**	**Remarks**
	quantify the noise and vibration sources impacting the building(s), the amount of outdoor-to-indoor noise reduction provided in the architectural plans, and any upgrades required to meet the City's interior noise standards (Title 24 [Building Code] of the California Code of Regulations), as applicable. Required upgrades may include, but not be limited to: upgraded dual glazed windows, mechanical ventilation/air conditioning, exterior wall/roof assemblies free of cut-outs or openings, and upgraded exterior wall assemblies. The building upgrades described in the report shall be incorporated into the architectural plans for the buildings and implemented with building construction, and shall be verified by the City's Building Division.						
HYDROLOGY AND WATER QUALITY							
HWQ-1	Prior to grading permit issuance and as part of the project's compliance with the NPDES requirements, individual development projects shall prepare and submit a Notice of Intent (NOI) to the California State Water Resources Control Board, providing notification and intent to comply with the State of California General Permit.	Prior to Issuance of Grading Permits	Proof of NOI Submittal	City of Upland Public Works Department			
HWQ-2	Individual development projects shall prepare a Stormwater Pollution Prevention Plan (SWPPP) conforming to the current National Pollution Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, which shall be submitted to the Department of Public Works for review and approval.	Prior to Issuance of Grading Permits/ Periodic Site Inspections	Approval of Stormwater Pollution Prevention Plan/ Ongoing During Construction	City of Upland Public Works Department			

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	• The SWPPP shall be prepared and updated as needed during the course of construction to satisfy the requirements of each phase of development. The plan shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to eliminate polluted runoff until all construction work for the project is completed. The SWPPP shall include treatment and disposal of all dewatering operation flows and for nuisance flows during construction.						
HWQ-3	Individual development projects shall prepare a Water Quality Management Plan (WQMP) conforming to the current National Pollution Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, which shall be submitted to the Department of Public Works for review and approval. • A WQMP shall be prepared, maintained, and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall incorporate water quality measures for all phases of the project.	In Conjunction with Development Applications and Prior to Issuance of Grading Permits	Approval of Water Quality Management Plan	City of Upland Public Works Department			
HWQ-4	Prior to issuance of building permits, developers shall pay applicable storm drain facilities development impact fees.	Prior to Issuance of Building Permits	Payment of Storm Drain Facilities Development Impact Fees	City of Upland Building and Safety Division			

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HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	Prior to demolition and/or rehabilitation activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.	Prior to Demolition and/or Rehabilitation Activities	Submittal of an Asbestos Survey/ Closure and Concurrence Letter From Appropriate Regulatory Agency, if Required / Issuance of Demolition Permits	City of Upland Building and Safety Division			
HAZ-2	If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City Project Engineer.	During Construction Activities	Closure and Concurrence Letter From Appropriate Regulatory Agency, if Required	City of Upland Building and Safety Division			

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HAZ-3	A formal Phase I Environmental Site Assessment (ESA) shall be prepared on a project-by-project basis for any commercial and industrial properties involving hazardous materials or waste. The Phase I ESA shall be prepared in accordance with ASTM Standard Practice E 1527-05 or the Standards and Practices for All Appropriate Inquiry (AAI), prior to any land acquisition, demolition, or construction activities. The Phase I ESA would identify specific Recognized Environmental Conditions (RECs), which may require further sampling/remedial activities by a qualified hazardous materials Environmental Professional with Phase II/site characterization experience prior to land acquisition, demolition, and/or construction. The Environmental Professional shall identify proper remedial activities, if necessary.	Prior to Land Acquisition (for public projects), In Conjunction with Development Applications, and Prior to Issuance of Demolition, Grading, or Building Permits	Approval of Phase I Studies/ Closure and Concurrence Letter From Appropriate Regulatory Agency, if Remediation Activities Required	City of Upland Building and Safety Division			
HAZ-4	For projects that would disturb soils within the existing and historic railroad rights-of-way, qualified hazardous materials Environmental Professional with Phase II/site characterization experience shall conduct sampling in order to determine whether or not contamination exists within the areas of proposed disturbance. Results of the sampling would indicate the level of remediation efforts that may be required, if necessary. All activities conducted within railroad rights-of-way shall be conducted under the purview of the local regulatory agency to identify proper handling procedures, should contamination be present.	Prior to Land Acquisition (for public projects), In Conjunction with Development Applications, and Prior to Issuance of Demolition, Grading, or Building Permits	Approval of Phase II Studies/ Closure and Concurrence Letter From Appropriate Regulatory Agency, if Remediation Activities Required	City of Upland Building and Safety Division			

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HAZ-5	If unknown wastes or suspect materials are discovered during construction by the contractor that are believed to involve hazardous waste or materials, the contractor shall comply with the following: • Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area; • Notify the City's Project Engineer; • Secure the area as directed by the Project Engineer; and • Notify the implementing agency's Hazardous Waste/Materials Coordinator. The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.	Ongoing During Construction	Closure and Concurrence Letter From Appropriate Regulatory Agency, if Remediation Activities Required	City of Upland Building and Safety Division			
FIRE PROTECTION SERVICES							
FPS-1	Prior to building permit issuance, the City of Upland and Upland Fire Department shall review fire service and equipment needs for Fire Station No. 161 and surrounding areas to determine whether additional personnel or equipment would be required to adequately serve the additional increase in development to the area. If it is determined that additional staffing and/or equipment is needed, funding for the additional personnel or equipment shall be committed prior to the issuance of building permits within the Plan area.	Prior to Issuance of Building Permits	Commitment of Funding, if Necessary/ Issuance of Building Permits	City of Upland Fire Department/ City of Upland Planning Division			

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ENVIRONMENTAL IMPACT REPORT

MITIGATION MONITORING PROGRAM

	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
POLICE PROTECTION SERVICES							
POL-1	Prior to building permit issuance for the 250th, 500th, 750th and 1,000th housing unit within the Plan area, the City of Upland and Upland Police Department shall review police protection needs for the area at that time and determine whether additional police officers would be required to adequately serve the additional increase in housing units to the area. If it is determined that additional staffing is needed, funding for the additional police officer(s) shall be committed prior to the issuance of residential building permits within the Plan area.	Prior to Issuance of Building Permits	Commitment of Funding, if Necessary/ Issuance of Building Permits	City of Upland Police Department/ City of Upland Planning Division			
POL-2	Prior to issuance of building permits, individual project developers shall incorporate crime prevention through environmental design (CPTED) techniques identified by the Upland Police Department to address public safety and crime prevention, subject to the approval and verification of the Community Development Director.	Prior to Issuance of Building Permits	Verification that CPTED Techniques are Incorporated/ Issuance of Building Permits	City of Upland Police Department/ City of Upland Planning Division			
SCHOOLS							
SCH-1	Individual project applicants shall pay all applicable Development Impact Fees to the appropriate school district(s) prior to final project approval and issuance of certificates of occupancy. Proof of fee payment shall be provided to the City of Upland.	Prior to Issuance of Certificates of Occupancy	Proof of Payment of Development Impact Fees to Appropriate School Districts	City of Upland Building and Safety Division			

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT MITIGATION MONITORING PROGRAM							
					Verification of Compliance		
	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Initials	Date	Remarks
WATER							
WAT-1	Prior to approval of any entitlement, individual project developers shall conduct a fire flow capacity test to determine if adequate fire flow exists prior to development. If fire flow is found to be inadequate, the developer shall design and bond for necessary improvements prior to the issuance of building permits and complete all necessary improvements prior to final inspection.	Prior to Approval of Any Entitlement/ Prior to Issuance of Building Permits	Verification of Fire Flow Capacity/ Issuance of Building Permits/ Final Inspection	City of Upland Public Works Department			
WAT-2	Prior to approval of any entitlement, the City shall determine if adequate storage capacity is available to serve the development. If storage capacity is found to be inadequate, the necessary improvements shall be implemented prior to development.	Prior to Approval of Any Entitlement/ Prior to Issuance of Building Permits	Verification of Adequate Storage Capacity/ Issuance of Building Permits	City of Upland Public Works Department			
WAT-3	Prior to issuance of building permits, developers shall pay applicable water facilities (e.g., delivery, storage, etc.) development impact fees.	Prior to Issuance of Building Permits	Payment of Water Facilities Development Impact Fees	City of Upland Building and Safety Division			
WASTEWATER							
WW-1	Prior to approval of any entitlement, the City shall determine whether adequate sewer capacity is available to serve the proposed development. If sewer capacity is found to be inadequate, the developer shall design and bond for necessary improvements prior to the issuance of building permits and complete all necessary improvements prior to final inspection.	Prior to Approval of Any Entitlement/ Prior to Issuance of Building Permits	Verification of Adequate Sewer Capacity/ Issuance of Building Permits/ Final Inspection	City of Upland Public Works Department			

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING PROGRAM							
	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
WW-2	Prior to issuance of connection permits, the project developer shall pay all applicable development impact fees required by the City of Upland and/or the Inland Empire Utilities Agency.	Prior to Issuance of Connection Permits	Payment of Development Impact Fees	City of Upland Building and Safety Division			
SOLID WASTE							
SW-1	Future development projects within the Plan area shall comply with all applicable City, County, State, and Federal regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.	Periodic Site Inspections	Ongoing During Construction and Operation	City of Upland Public Works Department			
ELECTRICITY AND NATURAL GAS							
EN-1	Prior to issuance of building permits, individual project developers shall coordinate with City of Upland and SCE planning staff regarding potential facility relocation within the Plan area to ensure potential service interruptions are minimized.	In Conjunction with Development Applications	Coordination with City of Upland and SCE/ Issuance of Building Permits	City of Upland Planning Division			
EN-2	Prior to issuance of building permits, individual project developers shall pay the necessary costs required to relocate existing SCE infrastructure and facilities.	Prior to Issuance of Building Permits	Proof of Payment to SCE	City of Upland Planning Division			
EN-3	Prior to issuance of building permits, individual project developers shall coordinate with City of Upland and SCGC planning staff regarding potential facility relocation within the Plan area to ensure potential service interruptions are minimized.	In Conjunction with Development Applications	Coordination with City of Upland and SCGC/ Issuance of Building Permits	City of Upland Planning Division			

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT							
MITIGATION MONITORING PROGRAM							
	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
EN-4	Prior to issuance of building permits, individual project developers shall pay the necessary costs required to relocate existing SCGC infrastructure and facilities.	Prior to Issuance of Building Permits	Proof of Payment to SCGC	City of Upland Planning Division			

SECTION 13.0
Comments and Responses

Section 13.0
COMMENTS AND RESPONSES

13.1 CEQA REQUIREMENTS

Before approving a project, the California Environmental Quality Act (CEQA) requires the Lead Agency to prepare and certify a Final Environmental Impact Report (EIR).

In accordance with Sections 15120 through 15132 and Section 15161 of the *CEQA Guidelines*, the City of Upland has prepared an EIR for the Historic Downtown Upland Specific Plan Project (SCH #2009111055). The Response to Comments section, combined with the Draft EIR and Mitigation Monitoring Program, comprise the Final EIR.

The following is an excerpt from the *CEQA Guidelines*, Section 15132, Contents of Final Environmental Impact Report:

The Final EIR shall consist of:

(a) The Draft EIR or a version of the draft.

(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency.

This Comments and Responses section includes all of the above-required components and shall be attached to the Final EIR.

13.2 PUBLIC REVIEW PROCESS – DRAFT EIR

The Draft EIR was circulated for review and comment to the public, agencies, and organizations. The Draft EIR was also circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research. The 45-day public review period ran from November 10, 2010 to December 27, 2010. Comments received during the 45-day public

review period from the public and local and State agencies on the Draft EIR have been incorporated into this section.

13.3 FINAL EIR

The Final EIR allows the public and Lead Agency an opportunity to review revisions to the Draft EIR, the responses to comments, and other components of the EIR, such as the Mitigation Monitoring Program, prior to approval of the project. The Final EIR serves as the environmental document to support a decision on the proposed project.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by Section 15090 of the *CEQA Guidelines*:

- That the Final EIR has been completed in compliance with CEQA;
- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information in the Final EIR prior to approving the project; and
- That the Final EIR reflects the Lead Agency's independent judgment and analysis.

Additionally, pursuant to Section 15093(b) of the *CEQA Guidelines*, when a Lead Agency approves a project that would result in significant, unavoidable impacts that are disclosed in the Final EIR, the agency must submit in writing its reasons for supporting the approved action. This Statement of Overriding Considerations is supported by substantial information in the record, which includes the Final EIR. Since the proposed project would result in significant, unavoidable impacts, the Lead Agency would be required to adopt a Statement of Overriding Considerations if it approves the proposed project.

These certifications, the Findings of Fact, and the Statement of Overriding Considerations are included in a separate Findings document. Both the Final EIR and the Findings will be submitted to the Lead Agency for consideration of the proposed project.

13.4 WRITTEN COMMENT LETTERS AND RESPONSES

All correspondence from those agencies or individuals commenting on the Draft EIR is reproduced on the following pages. The individual comments on each letter have been consecutively numbered for ease of reference. Following each comment letter are responses to each numbered comment. A response is provided for each comment raising significant environmental issues. Added or modified text is underlined (example), while deleted text will have a strike out (example) through the text, and is included in a box, as the example below shows.

"Text from EIR" "Text from EIR"

Comment Letters

A total of eight written comment letters were received during the 45-day public review period.

A. Ontario-Montclair School District, dated December 2, 2010
B. Department of Toxic Substances Control, dated December 20, 2010
C. KPT Properties LLC, dated December 22, 2010
D. State of California Governor's Office of Planning and Research, dated December 28, 2010
E. Annie Dupin LePendeven, dated December 29, 2010
F. Pierre Le Pendeven, dated December 29, 2010
G. Southern California Edison, dated January 4, 2011
H. K Properties LLC, dated December 27, 2010

COMMENT LETTER A

BOARD OF TRUSTEES
Paul Vincent Avila
David Campio
Samuel Crowe
J. Steve Garcia
Maureen Mendoza

Ontario-Montclair
School District

950 West D Street, Ontario, California 91762 • (909) 418-6366 • FAX (909) 459-2500
FACILITIES PLANNING AND OPERATIONS

James Q. Hammond, Ed.D.
Superintendent

Casey Cridelich
Assistant Superintendent
Business Services

Craig E. Misso
Director, Facilities Planning and Operations

December 2, 2010

Karen Peterson, Planning Manager
City of Upland, Community Development Department
460 North Euclid Avenue
Upland, California 91785

Regarding: Ontario-Montclair School Districts interest in areas to be redeveloped.

Dear Ms. Peterson,

I am writing you regarding the planned redevelopment of the Historic Downtown Upland Specific Plan Project. Although the project is in the city of Upland, the Ontario-Montclair School District actually serves students in part of the area to be redeveloped. The area south of the Metro-Link tracks, east of Euclid Avenue, and west of Vineyard Avenue is within the District's boundaries. Please see the attached boundary map.

A1

To insure developer fees due to the District are not inadvertently paid to the wrong school district, I request your assistance by directing parties pursuing projects within this area to the Ontario-Montclair School District, Facilities Planning office to pay all necessary developer fees.

Thank you for your assistance. Feel free to contact me if you have any questions.

RECEIVED
DEC 7 – 2010
COMMUNITY DEVELOPMENT

Respectfully,

Craig Misso
Director, Facilities Planning and Operations

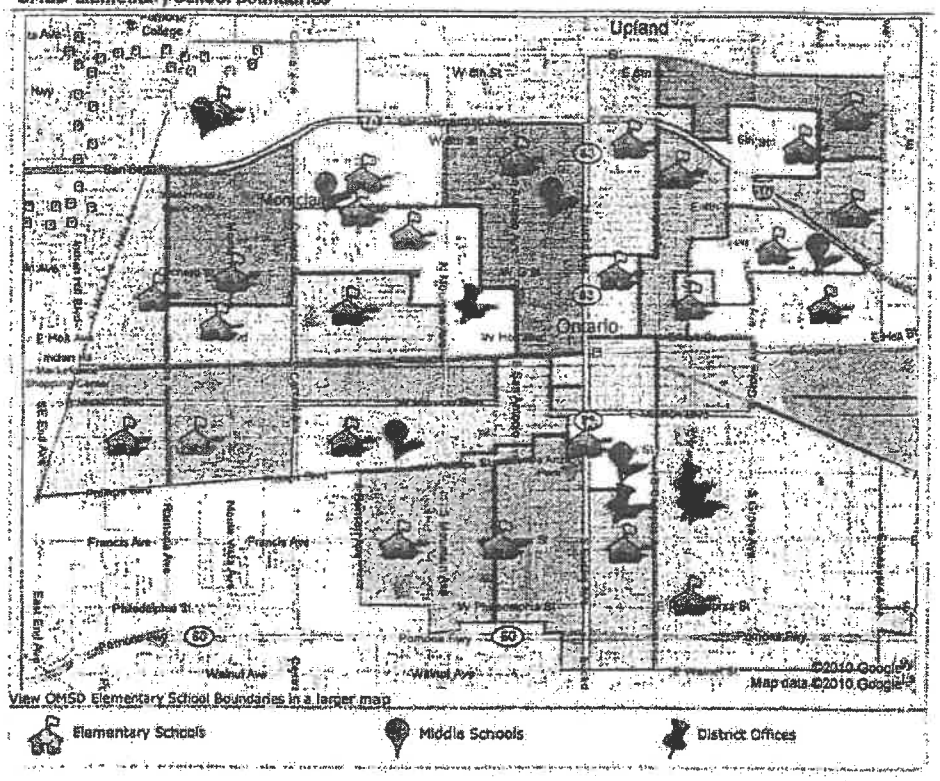
Cc: Upland Unified School District

Enc; Boundary Map

Middle School Boundary Map

Printable Map of Schools

OMSD Elementary School Boundaries



View OMSD Elementary School Boundaries in a larger map

Elementary Schools Middle Schools District Offices

A. RESPONSES TO COMMENTS FROM CRAIG MISSO, DIRECTOR, FACILITIES PLANNING AND OPERATIONS, ONTARIO-MONTCLAIR SCHOOL DISTRICT, DATED DECEMBER 2, 2010.

A1. The comment notes that a portion of the project area is located within the Ontario-Montclair School District and wants to ensure developer fees due to the District are not inadvertently paid to the wrong district. The City's Building Official collects fees on behalf of each school district within the City's boundaries, including the Ontario-Montclair School District. Draft EIR Section 5.11, Schools, has been revised in the Final EIR to include the Ontario-Montclair School District, as well as the Chaffey Joint Union High School District. The complete section, with revisions, is included at the end of subsection 13.5, Errata for Final EIR.

COMMENT LETTER B

Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
5796 Corporate Avenue
Cypress, California 90630

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

RECEIVED
DEC 22 2010
COMMUNITY DEVELOPMENT

December 20, 2010

Ms. Karen Peterson, Planning Manager
City of Upland, Community Development Department
460 North Euclid Avenue
Upland, California 91787

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN PROJECT (SCH #2009111055), SAN BERNARDINO COUNTY

Dear Ms. Peterson:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Availability of a draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "The proposed Historic Downtown Upland Specific Plan (Specific Plan) is located within the City of Upland. The City of Upland (City) is situated in the westernmost part of San Bernardino County. The 210-acre Specific Plan Area (Plan area) is located in the southern portion of the City. It is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east and Euclid Avenue to the west. The Specific Plan contains permitted uses, development standards, and design guidelines to guide development within each of the nine districts in order to achieve the overall vision for the Plan area. Land uses currently within Downtown Upland include commercial, office, institutional, multi-and single-family residential, and parking, as well as vacant parcels, some of which are publicly owned".

Based on the review of the submitted document DTSC has the following comments:

1) DTSC provided comments on the project Notice of Preparation (NOP) on December 7, 2009; some of those comments have been addressed in the submitted draft Environmental Impact Report. Please ensure that the other comments will also be addressed in the final EIR. **B1**

2) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies which would not be responsible parties under CERCLA, or a Voluntary Cleanup Agreement (VCA) **B2**

for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489. **B2**

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov, or by phone at (714) 484-5491.

Sincerely,

Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov.

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
ADelacr1@dtsc.ca.gov

CEQA # 3078

B. RESPONSES TO COMMENTS FROM GREG HOLMES, UNIT CHIEF, BROWNFIELDS AND ENVIRONMENTAL RESTORATION PROGRAM, DEPARTMENT OF TOXIC SUBSTANCES CONTROL, DATED DECEMBER 20, 2010.

B1. The comment states that DTSC provided comments on the project Notice of Preparation and notes that some of the comments provided have been addressed in the Draft EIR and requests the other comments also be addressed. The comment letter does not identify specifically which NOP comments were not addressed in the Draft EIR. Where applicable, Section 5.7, Hazards and Hazardous Materials, of the Draft EIR addresses the comments provided in response to the NOP. Pages 5.7-12 through 5.7-19 of the Draft EIR evaluate whether conditions within the project area may pose a threat to human health or the environment. The Draft EIR identifies existing conditions within the Plan area, including listed regulatory sites and their current status (Pages 5.7-2 through 5.7-4 summarize the results of the regulatory databases searched).

Pages 5.7-6 through 5.7-11 of the Draft EIR identify the Federal, State, and local regulatory policies and law that apply to hazards and hazardous materials. Further, the analysis identifies the potential of human exposure to hazardous substance in the event of an accidental release. The Historic Downtown Upland Specific Plan does not propose site-specific development at this time. Identification of site-specific hazards, including environmental investigations, would be conducted on a project-by-project basis. Remediation would occur prior to future development on or adjacent to affected portions of a proposed development site. As future development projects are proposed, the City will review the project to determine potential impacts to the environment, including sensitive receptors. The City will determine the need for a health risk assessment on a project-by-project basis. Future development would require appropriate discretionary review, including evaluation of site-specific conditions and would be handled in strict accordance with existing regulations. In addition to compliance with applicable Federal, State, and local regulatory requirements pertaining to hazardous materials, the Draft EIR has identified mitigation measures that would be required to reduce potential hazardous materials impacts associated with project implementation, to a less than significant level.

B2. The comment provides contact information for cleanup oversight from the Department of Toxic and Substance Control. The comment does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project; therefore, no further response is necessary.

COMMENT LETTER C

RECEIVED

DEC 23 2010

COMMUNITY DEVELOPMENT

KPT PROPERTIES LLC

George B. Taunton
684 Dundee Ct.
Brea, CA 92821

Office: (714) 990-0267
Cell: 714) 514-0267
Fax: 714) 990-6248

Email: georgetaunton@pacbell.net

MEMO

To: Karen Peterson, City of Upland
From: George Taunton
Date: December 22, 2010

RE; Upland Downtown Specific Plan Draft comments and concerns pertaining to the Residential Transit District.

I have been reading the draft development code to the Downtown Specific plan as it pertains to our submittal for our nine and one half acres residential project in the Residential Transit District . We are in the process of updating our plans for our next submittal based on your past comments and implementing as many draft Specific plan items that we can. However there are a few stumbling blocks that would make it hard to move forward with our submittal at this time. I will outline these and would be interested in your comments or clarifications as to my concerns and how we might move forward on this important first step in implementing the Historic Upland Downtown Plan. We would be moving 200 plus residential units forward that I feel would jump start the new downtown plan. We all don't want a study that doesn't produce results.

Some of concerns are as follows:

1. We are not sure what is meant by "complete streets". Under 5-36 c. it says that a projects over 2.5 acres, residential streets will be designed under standards in Chapter 6. We think that our street design meets the intent but not the exact measurements shown. **C1**

2. Development code page 5-36 Residential Transit Height Diagram calls for a 12 foot **minimum** first floor height. This would not be in proportion to scale and use of our residential buildings. **C2**

3. We think that 80 square feet of private outdoor living space is appropriate, only with a minimum dimension of 8 ft not 10 feet. If we have the private outdoor space above the ground floor it is extremely hard from a structural point of view to cantilever out 10 feet. The scale and proportions would not be to scale. Most studies now point to smaller patios because homeowners would rather have more space indoors and would suggest 80 square feet minimum. We can provide 90 square feet with a 8 foot minimum

C3

4. On a 9 plus acre site is would be impossible to have the main recreation area less than 300 feet from any unit it might serve as the draft code calls for. We have provided a pocket park and a tot lot for the three areas needed to serve the development. Also they would have to cross residential streets to get to the recreation facilities.

C4

5. We are working on some variations to design types and updating the paired housing (duplex housing) to better meet the style variation called out in the draft specific plan but first we must see if we can get some of these suggestions clarified and implemented in the specific plan.

C5

Also as I read through the plan, and having developed parking structures, the narrow parking structures called out next to the rail right of way are problematic to build . I believe a 60 foot width would not produce an acceptable structure and you might look into that part of the plan that calls for that next to Park Stowell.

C6

We would like to move forward on our submittal as it pertains to the Downtown Plan, and any comments or suggestions would be greatly appreciated.

Hope you have a great Holiday

George

C. RESPONSES TO COMMENTS FROM GEORGE TAUNTON, KPT PROPERTIES LLC, DATED DECEMBER 22, 2010.

C1. The comment references residential street standards and whether a specific project meets the intent of the standards. Individual projects within the Historic Upland Downtown Specific Plan would be reviewed on a project-by-project basis to determine consistency with the Development Code of the proposed Specific Plan, if adopted. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

C2. The comment references minimum first floor building heights and pertains to the Development Code of the proposed Specific Plan. It is noted that the diagram referenced in the Specific Plan is incorrect and the standard applies to commercial buildings only. The diagram will be corrected in the Specific Plan. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

C3. The comment references private outdoor living space dimensions and pertains to the Development Code of the proposed Specific Plan. The Specific Plan standard for minimum private outdoor living space will be revised to reflect 80 square feet and a minimum dimension of eight feet. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

C4. The comment references the requirement to place recreation areas within 300 feet of residential units and pertains to the Development Code of the proposed Specific Plan. The Specific Plan will be revised to change this from a requirement to a guideline. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

C5. The comment references a specific project and design types to meet the variation called out in the proposed Specific Plan. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

C6. The comment references the parking structures identified near the railroad right-of-way and requests the City look at the feasibility of a structure next to Park Stowell. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

COMMENT LETTER D

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Cathleen Cox
Acting Director

December 28, 2010

RECEIVED

JAN 03 2011

COMMUNITY DEVELOPMENT

Karen Peterson
City of Upland
460 North Euclid Avenue
Upland, CA 91785

Subject: Historic Downtown Upland Specific Plan
SCH#: 2009111055

Dear Karen Peterson:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 27, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

D1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2009111055
Project Title Historic Downtown Upland Specific Plan
Lead Agency Upland, City of

Type EIR Draft EIR

Description Note: Review per lead

The Historic Downtown Specific Plan provides permitted uses, development standards, and design guidelines to guide development within nine districts to achieve the overall vision for the Specific Plan area. The Specific Plan proposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. The Specific Plan would allow for commercial/retail, office, commercial/flex, public/institutional; industrial, public open space, and residential uses within the Downtown.

Lead Agency Contact

Name Karen Peterson
Agency City of Upland
Phone 909 931-4327 **Fax**
email
Address 460 North Euclid Avenue
City Upland **State** CA **Zip** 91785

Project Location

County San Bernardino
City Upland
Region
Lat / Long 34° 5' 47.5" N / 117° 38' 47.5" W
Cross Streets Arrow Highway, 8th Street, Campus Avenue and Euclid Avenue
Parcel No.
Township 1S **Range** 7W **Section** 8 **Base** SBB&M

Proximity to:

Highways I-10
Airports Cable
Railways Metrolink
Waterways No
Schools Various
Land Use Various/CT, CO, SFR, MFR, Civic, IL, TC/RS-7.5, RM-2.0, ML, MU, RM 2.0 (CO), (CP)S, CL, TC and Scenic Corridor Overlay

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Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

---

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 8; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; Department of Housing and Community Development

---

Date Received 11/10/2010 **Start of Review** 11/10/2010 **End of Review** 12/27/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

clear: 12/27/2010

December 20, 2010

RECEIVED
DEC 27 2010
STATE CLEARING HOUSE

Ms. Karen Peterson, Planning Manager
City of Upland, Community Development Department
460 North Euclid Avenue
Upland, California 91787

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN PROJECT (SCH #2009111055), SAN BERNARDINO COUNTY

Dear Ms. Peterson:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Availability of a draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "The proposed Historic Downtown Upland Specific Plan (Specific Plan) is located within the City of Upland. The City of Upland (City) is situated in the westernmost part of San Bernardino County. The 210-acre Specific Plan Area (Plan area) is located in the southern portion of the City. It is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east and Euclid Avenue to the west. The Specific Plan contains permitted uses, development standards, and design guidelines to guide development within each of the nine districts in order to achieve the overall vision for the Plan area. Land uses currently within Downtown Upland include commercial, office, institutional, multi-and single-family residential, and parking, as well as vacant parcels, some of which are publicly owned".

Based on the review of the submitted document DTSC has the following comments:

1) DTSC provided comments on the project Notice of Preparation (NOP) on December 7, 2009; some of those comments have been addressed in the submitted draft Environmental Impact Report. Please ensure that the other comments will also be addressed in the final EIR.
2) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies which would not be responsible parties under CERCLA, or a Voluntary Cleanup Agreement (VCA)

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for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov, or by phone at (714) 484-5491.

Sincerely,

Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov.

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
ADelacr1@dtsc.ca.gov

CEQA # 3078

D. RESPONSES TO COMMENTS FROM TERRY ROBERTS, DIRECTOR, STATE CLEARINGHOUSE, STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE AND PLANNING UNIT, DATED DECEMBER 28, 2010.

D1. The State Clearinghouse letter provides confirmation of receipt of the Historic Downtown Upland Specific Plan Draft EIR, close of the public review period, and provides copies of the agency comments forwarded to the State Clearinghouse. The comment letter forwarded by the State Clearinghouse from the Department of Toxic Substances Control was also received directly by the City and is included herein as Comment Letter B. No additional response is necessary.

COMMENT LETTER E

Karen Peterson

From: annie dupin le pendeven [amdlp2005@gmail.com]
Sent: Wednesday, December 29, 2010 6:17 PM
To: Karen Peterson
Subject: Upland's Planning Project

Hi Karen,

Following our conversation on the counter top I wanted to thank you for all the information you gave me.

Since I was back home after such a long absence, I had many thing to catch up with.

However, I allowed myself a couple hours reviewing, I just say get acquainted, the updated draft and projection for the future.

First thing of all creating new dynamics in Historic Downtown Upland is a core necessity. Density downtown should recreate, rebalance that critical mass that has completely disappeared over the years.

Projecting for the future within continuous changes make it more complex. More specifically Environmental Laws, regulations, often referring to unrealistic approach rather than core necessity.

E1

Using the existing arterial seem the best approach. One main concern though Euclid.

Euclid as a large artery should be kept in its magnificence.

Upland's real downtown should remain nested on the East side for several reason. The main being pedestrian security.

Time is a limit tonight.

I will transmit more of my brainstorming in the coming days.

Wish you a great Holidays.

Take good care.
Best wishes.

Annie Dupin LePendeven

E. RESPONSES TO COMMENTS FROM ANNIE DUPIN LEPENDEVEN, DATED DECEMBER 29, 2010.

E1. The comment letter identifies creating new dynamics within Historic Downtown Upland as a core necessity and that Euclid as a large artery should be kept in its magnificence. The comment also state's that Upland's real downtown should remain nested on the East side for several reasons, with the main one being pedestrian security. The comment notes that projecting for the future with continuous change is complex and environmental laws and regulations often refer to an unrealistic approach rather than core necessity. These comments are generally consistent with the proposed Specific Plan. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

COMMENT LETTER F

Karen Peterson

From: pierre lependeven [plependeven@yahoo.com]
Sent: Wednesday, December 29, 2010 6:56 PM
To: Karen Peterson
Subject: Historic Upland Downtown Specific Plan Comments
Attachments: --static--bg_wreathsblue_1.jpg

Dear Karen,

Thank you for sharing the draft documents relative to the Upland Downtown Specific Plan. These documents are broadly consistent with the public meetings presentations that I attended. I am in agreement with the redevelopment concept from a urban planning point of view. Upland has a tremendous potential for this kind of redevelopment. **F1**

My first objection relates to the references to climate change and to the unnecessary regulations and therefore costs this will create for the redevelopment of Historic Upland Downtown. The "Effects of Climate Change on the Project" chapter (Page 5.4-27) is based on pseudo-science. The email scandal brought to the public attention a few months ago shows that climate "scientists" are more concerned to push an ideological agenda than by true scientific pursuits. A redevelopment of this magnitude has enough challenges to overcome without the creation of artificial and unnecessary barriers. **F2**

My second objection, as an avid cyclist, is to having an overpass over Euclid Avenue. It would be a huge mistake that would shatter the Euclid Avenue perspective. It would also be a deterrent for most casual cyclists who would not be able to use it and still attempt to cross Euclid at ground level. A more visually appealing, less costly solution would be to build a ground level crossing with a light activated by cyclists/pedestrians. (Same solution already implemented to cross San Antonio, Mountain Ave.). Another, solution would be to build an underpass which would be more user friendly because the grade difference would be about half the one for an overpass. Cyclists feel better to go down first because they pick up momentum to go up on the other side of the underpass. This objection also concern the other overpass project on the south side of downtown. **F3**

I hope this project will move forward in the near future.

Pierre LePendeven
P: (909) 374-6068
F: (909) 579-6487

Please consider the environment before printing this e-mail

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F. RESPONSES TO COMMENTS FROM PIERRE LEPENDEVEN, DATED DECEMBER 29, 2010.

F1. The comment states the documents are broadly consistent with the public meetings attended and agreement with the redevelopment concept. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

F2. The comment objects to the references to climate change and the unnecessary regulations and costs it will create for the redevelopment of the Downtown. It notes that the "Effects of Climate Change on the Project" is based on pseudo-science and that the climate scientists are pursuing an ideological agenda. Section 5.4 Air Quality/ Greenhouse Gas Emissions, of the Draft EIR addresses climate change in accordance with Federal, State, and regional mandates. Pursuant to CEQA, lead agencies are required to consider feasible means of mitigating the significant effects of greenhouse gas emissions. Mitigation measure AQ-7 identifies "green design" measures that focus primarily on energy efficiency, renewable energy, water conservation and efficiency, and solid waste measures to reduce greenhouse gas emissions. Implementation of these project design features will ensure consistency with adopted statewide plans and programs.

F3. The comment objects to an overpass over Euclid Avenue. It should be noted that the Specific Plan does not propose an overpass over Euclid. The Specific Plan does propose a mid-block at-grade crossing for the Pacific Electric Trail at Euclid Avenue with two potential crossing treatments, including overhead beacons or in-pavement flashers or bulbous at the intersection, providing a reduced curb-to-curb distance by expanding the sidewalk width at the intersection. The comment also notes similar concerns with a proposed overpass over the railroad tracks. Currently, in order to cross the Metrolink tracks, pedestrians and bicyclists must make a detour to either Campus Avenue or 2nd Avenue, where at-grade crossings exist. The proposed overpass would focus on providing pedestrian access between the Residential Transit and Citrus Transportation Districts, providing better connectivity with the Downtown. Although the overpass would also provide bicyclist access, bicyclists would continue to have access at Campus Avenue or 2nd Avenue, as well.

COMMENT LETTER G

SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

Lydia Roman
Region Manager
Local Public Affairs

January 4, 2011

Ms. Karen Peterson, Planning Manager
City of Upland, Community Development Department
460 North Euclid Avenue
Upland, CA 91785

RE: Draft Program Environmental Impact Report (Draft Program EIR) for the Historic Downtown Upland Specific Plan Project

Dear Ms. Peterson:

Southern California Edison (SCE) appreciates the opportunity to provide comment on the Draft Program EIR for the Historic Downtown Upland Specific Plan. The project is described as a specific plan of development establishing permitted uses, development standards and design guidelines to guide development within nine districts of Upland's downtown area. The proposed specific plan would allow for a maximum of 1,481 dwelling units, 864,545 square feet of non-residential uses and 29,907 square feet of public open space. Build-out of the site is estimated over a 20 year period.

SCE Company right-of-ways and fee-owned properties are purchased for the exclusive use of SCE to operate and maintain its present and future facilities. Any proposed use will be reviewed on a case-by-case basis by SCE's Operating Department. Approvals or denials will be in writing based upon review of the maps provided and compatibility with SCE right-of-way constraints and rights. In the event the project impacts SCE facilities or its land related rights, please forward six (6) sets of plans depicting SCE's facilities and associated land rights to the following location: G1

Real Properties Department
Southern California Edison Company
2131 Walnut Grove Avenue
G.O.3 – Second Floor
Rosemead, CA 91770

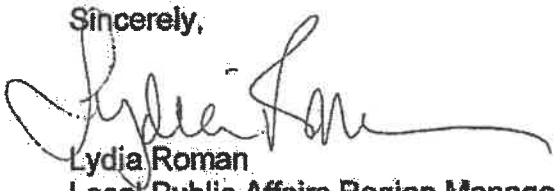
Please be advised if development plans result in the need to build new or relocate existing SCE electrical facilities that operate at or above 50 kV, the SCE construction may have environmental consequences subject to CEQA review as required by the California Public Utilities Commission (CPUC). If those environmental consequences are identified and addressed by the local agency in the CEQA process for the larger project, SCE may not be required to pursue a later, separate, mandatory CEQA review

1351 East Francis Ave.
Ontario, CA 91761
(909) 930-8501 PAX 16501
Fax: (909) 930-8407
Lydia.Roman@sce.com

through the CPUC's General Order 131-D (GO 131-D) process. If the SCE facilities are not adequately addressed in the CEQA review for the larger project, and the new facilities could result in significant environmental impacts, the required additional CEQA review at the CPUC could delay approval of the SCE power line portion of the project for two years or longer. G1

Once again, we appreciate the opportunity to comment on the Program Draft EIR for this project. If you have any questions regarding this letter, do not hesitate to contact me at (909) 930-8501.

Sincerely,



Lydia Roman
Local Public Affairs Region Manager
Southern California Edison Company

G. RESPONSES TO COMMENTS FROM LYDIA ROMAN, LOCAL PUBLIC AFFAIRS REGIONAL MANAGER, SOUTHERN CALIFORNIA EDISON, DATED JANUARY 4, 2011.

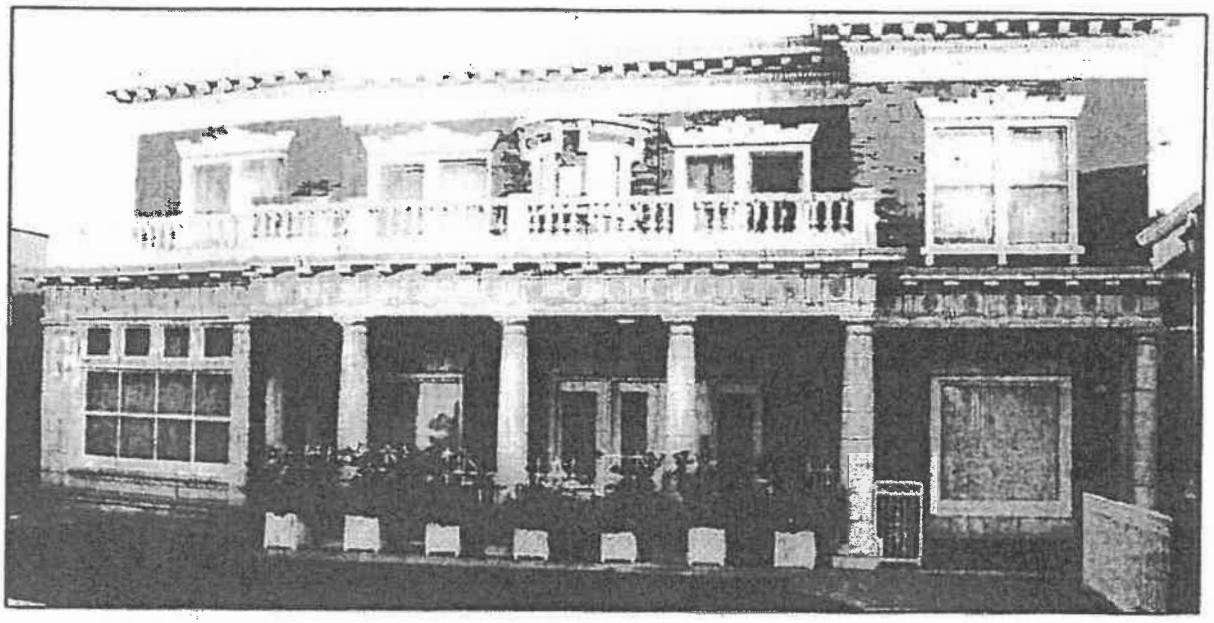
G1. The comment notes that SCE would review any proposed use of SCE right-of-ways on a case-by-case basis. Further, if development plans involve the need to build new or relocate existing SCE electrical facilities that operate at or above 50 kV, construction may have environmental consequences subject to CEQA. If additional CEQA analysis to address SCE facilities is required, the review could delay approval of the SCE power line portion of the project for two years or longer. The comment is noted. No further response is necessary.

Comment Letter

from

William F. Kimble
K Properties, LLC
15838 Aurora Crest Drive
Whittier, California 90605

Received December 27, 2010



We saved this one from the wrecking ball.

The Loftus House
Built in 1913
Owned By William & Margaret Kimble

To the City of Upland

I would like to introduce myself to the City of Upland. I am the Principal Member of K Properties LLC. We own the 16 lots, just south of the Metro-link station, between 3rd and Sultana.

At present we are very interested in how the Pacific Plan is going to affect our project and that of the surrounding area. I want to do the right thing for Upland and our project.

I am a general contractor Lic. #230049 and I have spent a lifetime in developing condos, tract housing, industrial buildings, sub terrain garages, manage more than 200 apartment units and even built a sausage factory. I am extremely reputable and I have never had any court issues with any of our projects.

William Kimble

INDEX

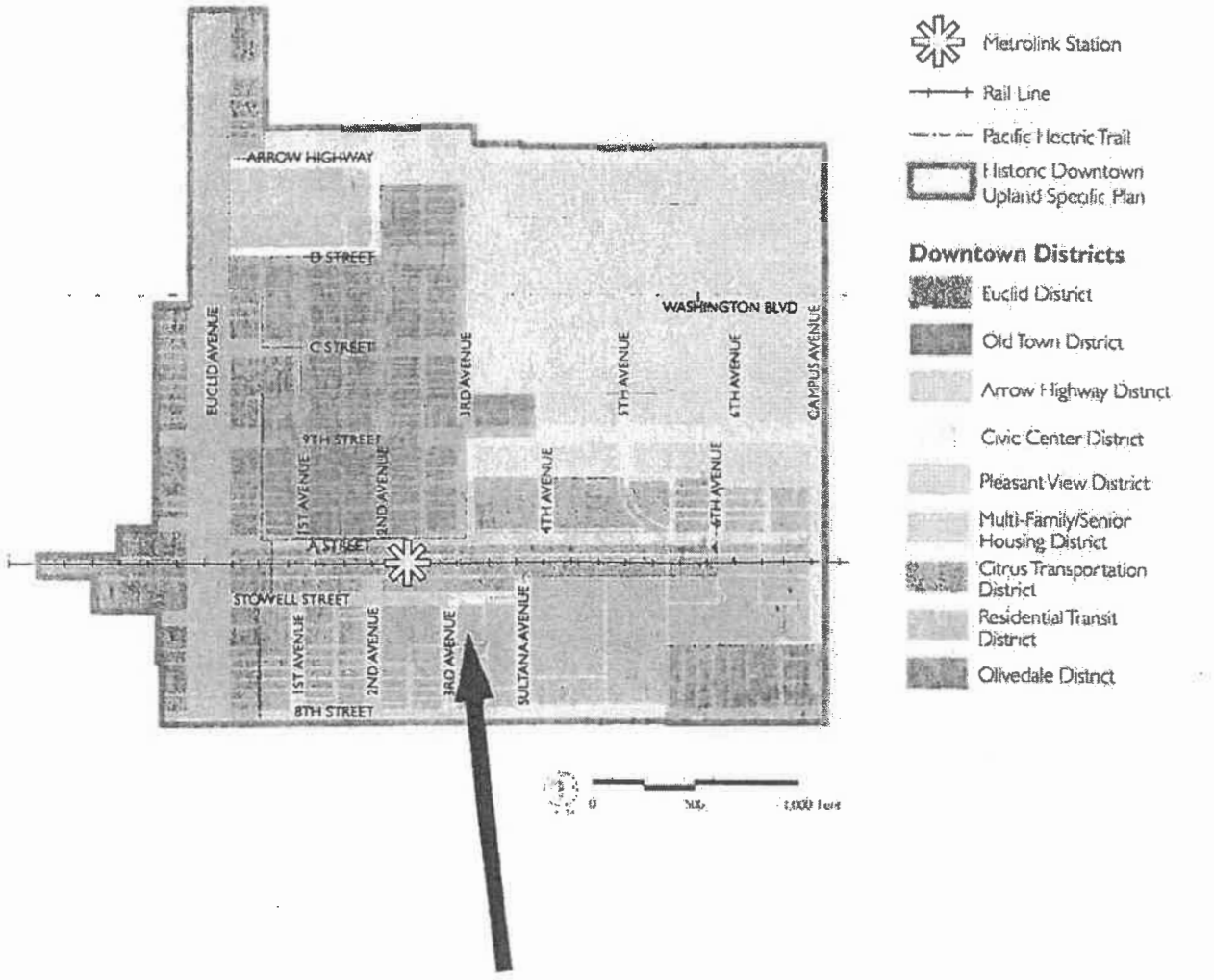
1. Split Zoning
2. 2.571 acres
3. Historic
4. Parking Garage
5. Roof Top
6. Storage Space
7. Minimum Balcony
8. Sidewalk
9. 750 Sq. Ft. Minimum

ITEM 1

B. Regulating Plan and Overlay Zones

The Regulating Plan shown in Figure 5-1 shall serve as the zoning map for Downtown Upland. It designates the districts and overlays that apply to each site within Downtown Upland. This chapter provides development standards for each district and overlay shown in the Regulating Plan. Each district and overlay is described below.

Figure 5-1 **Downtown Districts**



COMMENT **Subject**

5-4

H1

K Properties owns 16 lots between Sultana and 3rd just south of Park Stowell. The 4 lots on the N. West corner are in the Citrus transit district and the 12 remaining are in the residential transit district. I am worried that this could be a problem.

ITEM 2

c. Blocks

- Parcel subdivisions shall create a variety of parcel sizes that echo existing parcels in the Residential Transit District. Projects that would create a "super-block" or vacate existing rights-of-way are not allowed.
- If a project is more than 2½ acres, it shall be subdivided with an appropriate number of through streets or block divisions to create pedestrian scale blocks preferably between 200 to 350 feet wide by 300 to 400 feet long.

d. Internal Streets and Alleys

Sites being subdivided into additional blocks shall introduce new residential streets designed according to the standards and guidelines specified in Chapter 6, Section D.14 (New Residential Streets).

Internal alleys/lanes or drive aisles providing single-purpose vehicles access to multiple dwellings shall not exceed 150 feet in length.

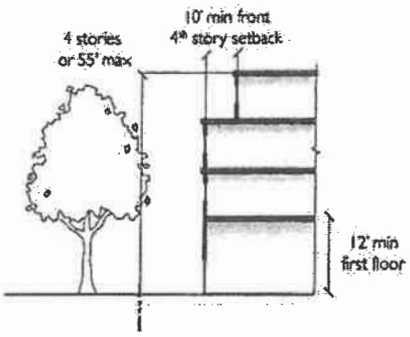
e. Development Intensity

Residential Density: 55 du/acre maximum

f. Height

Primary Structure: 4 stories or 55 feet maximum

Residential Transit Height Diagram



Accessory Structure: 1 story or 14 feet maximum

Architectural Feature: may exceed the given height limit of a primary structure by a maximum of 10 feet if the feature is appropriate to the architectural style of the building.

g. Setbacks

All setback areas facing a street or alley not devoted to walkways and driveways shall be properly landscaped and maintained in compliance with UMC Chapter 17.26.

Front Setback: An average of 15 feet, with no portion of any building(s) or structure(s) located closer than 5 feet from the front property line, unless otherwise specified herein. Such area to be fully landscaped excepting for walkways.

COMMENT

5-36

My parcel between 3rd St. and Sultana is 2.571 acres. This would mean that I would have to put in a street for a parcel that is boarded on three streets Sultana, 3rd St. and Park Stowell. It should not be necessary to have a street on this parcel.

H2

ITEM 3

William F. Kimble
Member

K PROPERTIES, LLC.
15838 Aurora Crest Drive
Whittier, CA 90605

Phone 562-943-5861
Fax 562-943-2151
Cell 562-896-1855
Email 4billkimble@charter.net

Upland Specific Plan Study
Page 5-42 & 5-43
Historic Preservation Overlay Zone

Re: 167 S. Sultana Ave.
Owned By K Properties LLC c/o William Kimble, Member
15838 Aurora Crest Dr.
Whittier CA 90605
Cell 562-943-5861
Office 562-943-5861
Fax 562-943-2651

Attn: Karen Peterson
I am writing in regards to the Adaptive Reuse Historic Preservation section, Project-Specific Standards of the Public Review Draft, Historic Upland Specific Plan. As the property owners, this section of the Specific Plan is a very serious problem for us. We have millions of dollars of property values and I hope that you truly understand why we are writing this article.

Page 5-42, Historic Preservation Overlay Zone
I have believed in Historic Preservation even before it was a law, but this building would be a problem for everyone. Governmental intent is to have as much housing as close as possible to public transportation. The object is to relieve the overloading of the freeways and to reduce smog.

H3

Some of the problems with the subject building are as follows:

1. A large part of the buildings north and south ends are below grade and any rain water runs into the building.
2. Large sections of the wall are sheet metal, and cannot be used for residential or commercial.
3. The building was built in stages and the roof does not have proper drainage.
4. Some of the concrete floors are sloped and others are in disrepair.
5. There are no windows in the entire building except for the office.

Page 5-43, Development Code for Historical Reuse

With this Code in place, commercial or residential development would not be logical from the Cities or developers perspective. ***The only logical use for this property is light industrial if this code is adapted.***

H3

I truly hope you can see that this building should not represent Historic Upland. I would like to invite the Historical Committee to tour the building.

Regards,

William Kimble

a) A property shall be used as it was historically or given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

b) The historic character of a property shall be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property shall be avoided.

c) Each property shall be recognized as a physical record of its time, place and use.

d) Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, shall not be undertaken.

e) Changes to a property that have acquired historic significance in their own right shall be retained and preserved.

f) Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

g) Deteriorated historic features shall be repaired rather than replaced. Where the severity of the deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture and where possible, materials.

h) Replacement of missing features shall be substantiated by documentary and physical evidence.

i) Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.

j) Archaeological resources shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.

k) New additions, exterior alterations or related new construction shall not destroy historic materials, features and spatial relationships that characterize the property.

l) The new work shall be differentiated from the old and shall be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

m) New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

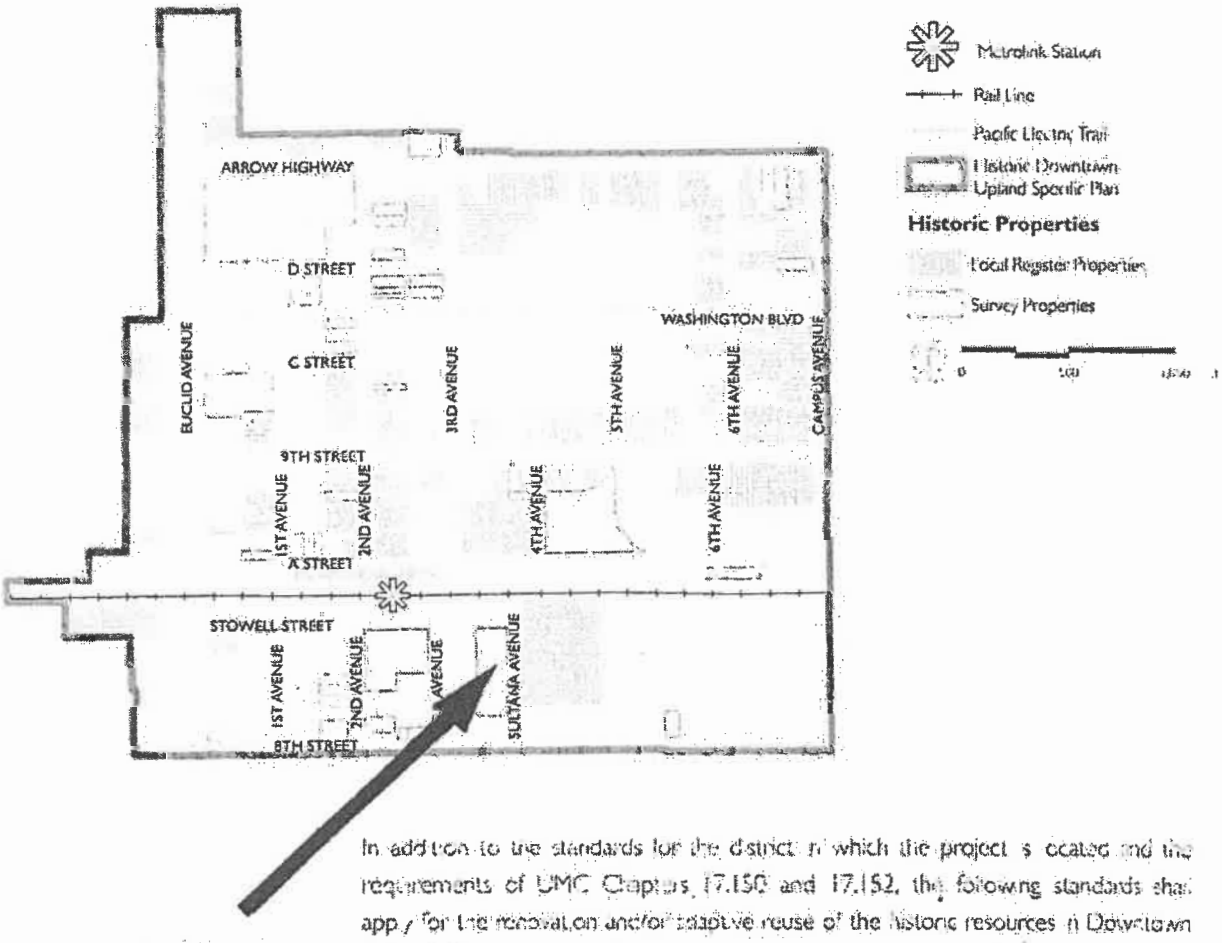
Historical Development Code

E. Project-Specific Development Standards

1. Historic Preservation and Adaptive Reuse

All Designated Cultural Resources as defined in Chapter 17.150 (the Local Register) and properties on the City's Historic Resource Survey shall adhere to the provisions of UMC Chapters 17.150 and 17.152 and the standards outlined in this section. A list of all historic resources in Downtown Upland is provided in Appendix C and shown in Figure 5-2. Properties may be added to the City's list of historic resources over time.

Figure 5-2 **Historic Preservation Overlay Zone**



In addition to the standards for the district in which the project is located and the requirements of UMC Chapters 17.150 and 17.152, the following standards shall apply for the renovation and/or adaptive reuse of the historic resources in Downtown Upland, shown in Figure 5-2 and as may be added to over time. The purpose of these standards is to ensure that properties of historic, cultural and architectural significance in Downtown Upland are protected, enhanced, perpetuated, and adaptively reused in a manner that retains the historic integrity of the structure and continues to contribute to the historic character of Downtown.

ITEM 4

William F. Kimble
Member

K PROPERTIES, LLC.
15838 Aurora Crest Drive
Whittier, CA 90605

Phone 562-943-5861
Fax 562-943-2151
Cell 562-896-1855
Email 4billkimble@charter.net

Upland Specific Plan Study
Parking Priority Location
The proposed parking garage just south of the Metrolink Station
Figure 7-9 Page 7-20
Parking Garage G

Attn: Karen Peterson
This parcel has a depth of 75 feet, plus or minus. The measurements are not precise because this parcel has not been surveyed recently and the dimensions are not on the maps.

If the parking garage would fit the location next to the Metrolink Station, it would promote the City of Upland as a good place to park cars and introduce Upland to many hundreds of thousands of future travelers.

This redevelopment location is unique in that it would start with a clean slate. It has the potential to be shaped into a showcase for the City of Upland.

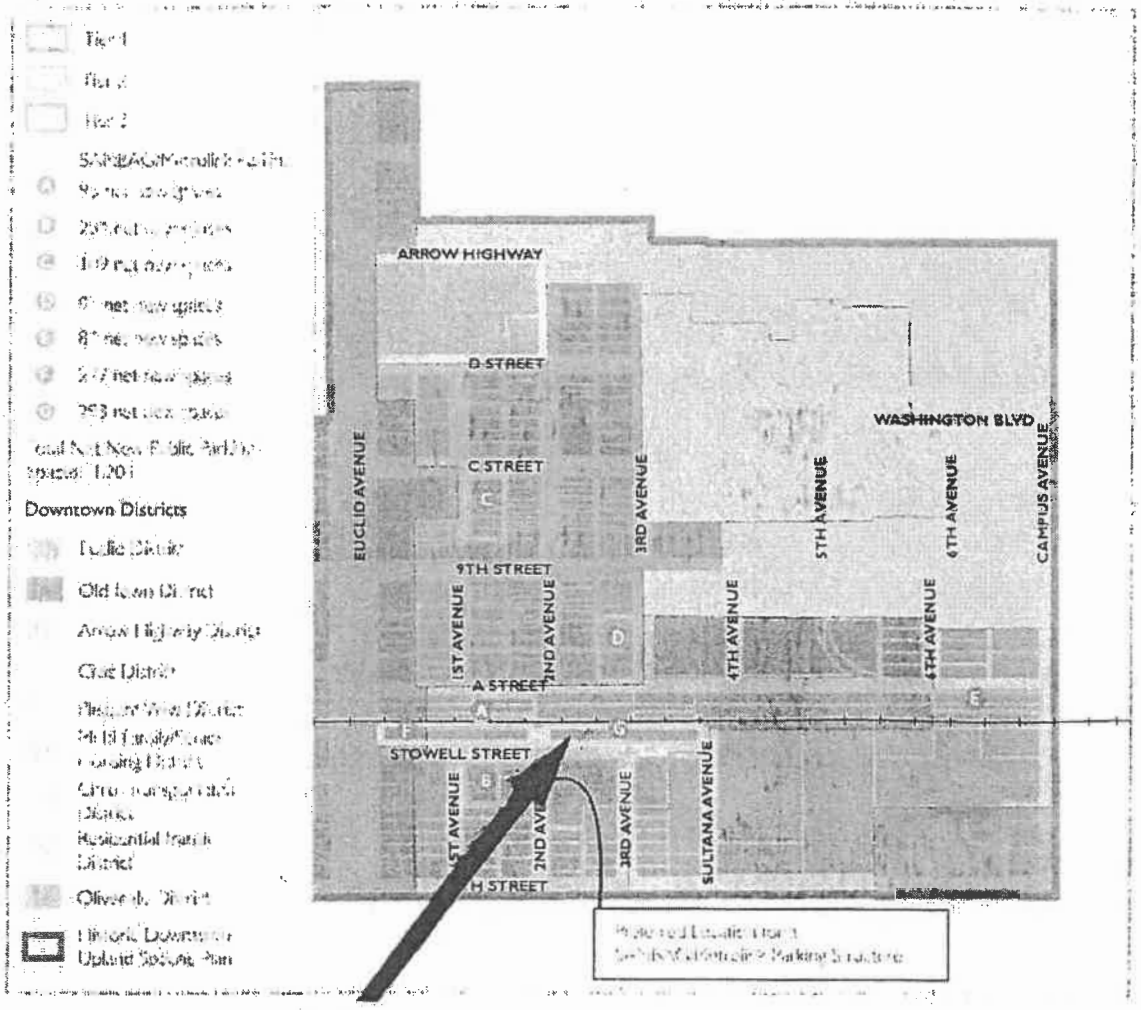
We believe that Park Stowell, between 2nd Street and Sultana, should be abandoned. The street area plus the 75 feet next to the Metrolink Station is one location to make a statement about Upland. Sultana would be a good place for a cull-de –sac with a roundabout and a work of art at its center. Third Avenue would also have a cull-de-sac. The open land could be divided up between landscaping, parking and on the east end a gazebo, a bicycle rack or whatever anyone can imagine that would say, "I'm Proud to live in Upland."

H4

In conjunction with parking, K Properties LLC is studying a 112 unit with 220 parking spaces. This might work as a public and private parking venture. I think that the time has come that we should start thinking more of public transportation, bicyclists and pedestrians, instead of cars.

William Kimble

Figure 7-9 **Parking Priority Locations**



If all locations identified in Figure 7-9 are developed into parking structures or lots as assumed, an additional 1,201 parking spaces could be provided in Downtown. However, it is likely that some parking locations will remain as surface lots until there is sufficient demand for structures.

Upland has the opportunity to partner with SANBAG to fund a new parking structure that serves the Upland Metrolink station and Downtown. The parking structure must be large enough to capture demand generated by Metrolink riders and provide additional parking for Downtown. Since the parking structure is to be used by both

i. *Private Outdoor Living Space*

a) For projects with 25 units or less, a minimum of 150 square feet of private outdoor living space shall be provided per dwelling unit, with a minimum of 10 feet in either direction. Projects over 25 units shall provide a minimum of 100 square feet of private outdoor living space per dwelling unit, with a minimum of 10 feet in either direction.

b) For detached dwelling units within a condominium project, a minimum of 400 square feet of private outdoor living space shall be provided per dwelling unit, with a minimum of 10 feet in either direction.

Private outdoor living space may be provided through a patio, balcony or rooftop terrace.

ii. *Common Outdoor Living Space*

a) A minimum of 100 square feet of common, usable outdoor living space shall be provided per dwelling unit for attached or detached units, with a minimum of 10 feet in either direction.

b) Common outdoor recreation areas shall be centralized, be placed in a convenient location minimizing the need to cross a primary driveway aisle, and be within 300 feet of each dwelling unit being served.

c) Landscaped areas that are not usable shall be excluded from this code.

d) Amenities, pools and paved recreation areas may be included in the required common outdoor living space.

e) Driveways and parking areas shall not be included in calculations of outdoor living space.

f) Active recreational facilities shall not be located nearer than 20 feet to any dwelling unit wall, or closer than 10 feet to any site boundary.

COMMENT

5-45-B

Roof top outdoor living entails a lot of problems:

1. **The safety of children, having a propensity for climbing.**
2. **It could be considered another story for engineering.**
3. **Noise problem, deck to units below.**
4. **Exits**
5. **Roof top outdoor living should be omitted.**

H5

H. RESPONSES TO COMMENTS FROM WILLIAM F. KIMBLE, K PROPERTIES LLC, DATED DECEMBER 27, 2010.

H1. The comment voices concern that some of the lots they own are located within the Citrus Transit District and others are located within the Residential Transit District. The Specific Plan District boundaries will be revised so that the six lot owned by K Properties that are currently within the Residential Transit District will be located within the Citrus Transportation District. This would allow for a greater range of uses, including multiple-family residential and mixed uses.

Exhibits 3-3, 3-5, and 3-6 in the Draft EIR will be revised in the Final EIR to reflect the District boundary modifications. The exhibits are included at the end of subsection 13.5, Errata for Final EIR.

H2. The comment refers to a specific lot and requirement to create an internal street. The comment pertains to Chapter 5, Section 8 (Residential Transit District) of the Specific Plan. The modifications to the Specific Plan District boundaries (refer to response to comment H1) would result in the parcel in question being located within the Citrus Transportation District. Since the Citrus Transportation District envisions dense, transit-oriented development and the area where this lot is located is well connected to the existing grid system by being bounded by Stowell, Sultana, and 3rd Avenue, the need for an internal street system is not anticipated. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H3. The comment voices concern that the existing structures at 167 Sultana Avenue would not be able to be demolished and a new project developed based on the Adaptive Reuse section of the Specific Plan. The structures at 167 Sultana are listed on the City's Historic Resources Survey and have been assigned a rating of 6, which means they are not eligible to be listed in the City's Local Register, either as an individual listing or contributor to a district.

The Historic Downtown Upland Specific Plan incorporates the existing historic preservation and demolition regulations contained in Sections 17.150 (Historic Preservation) and 17.152 (Demolition of Historic Buildings) of the Upland Municipal Code (UMC).

The structures at 167 Sultana are not subject to UMC Section 17.150 (Historic Preservation) since they are not considered a designated cultural resource. A designated cultural resource means "a cultural resource that has been placed on the Local Register of Historic Places." The buildings are not eligible to be listed on the Local Register; therefore, they are not considered a "Designated Cultural Resource" and are not subject to historic preservation provisions.

However, the structures are subject to UMC Section 17.152 (Demolition of Historic Buildings) since they are listed on the City's Historic Resources Survey. Under Section 17.152, a cultural resource means "any building, structure, or object possessing cultural, historical, or architectural significance included the City's Historic Resources Survey".

To demolish the structures and build a new project, a property owner would follow the City's existing process that is currently in effect today. This process is summarized below:

- The proposed demolition of all of the structures at 167 Sultana would be reviewed by the Planning Commission at a public hearing. The Planning Commission would be able to approve demolition based on the following considerations:
  - It is not economically feasible to rehabilitate or reuse the building or structure;
  - For income producing properties, rental at a reasonable rate of return is not feasible;
  - The applicant demonstrates that financial incentives have been investigated to relieve possible economic hardship.
  - Building code violations are not in and of themselves justifiable hardships but may be taken into consideration in determining the propriety of approving a request for demolition.

- If the Planning Commission approves the demolition request, a demolition permit would not be issued until plans for the new development was approved and a building permit was ready to be issued. As such, a property owner would want to process a demolition request concurrently with a development proposal to expedite the overall process.

H4. The comment states that Stowell between 2nd and Sultana should be abandoned and combined with the proposed parking lot/structure site to the north of Stowell and used for a public-private parking structure. City Staff believes it is important to maintain and improve the existing street grid. One of the main objectives of the Specific Plan is to improve mobility and pedestrian access throughout the downtown area. As such, Specific Plan Figure 7-1 shows Stowell as a local street and Specific Plan Figure 7-3 shows new sidewalk improvements to Stowell between Euclid and Sultana. This connection is important to provide existing and future residents east of Sultana more convenient access to 2nd Avenue, which provides the primary access to the commercial and service area north of the railroad tracks. However, the development of a joint public-private parking structure in conjunction with a development project may be mutually beneficial and could be explored in the future. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H5. The comment states that private rooftop living areas should be eliminated. This comment pertains to the development standards for Multiple-Family Residential projects. City Staff believes it is important to allow each developer to decide whether patio, balcony, or rooftop living area is feasible. Providing rooftop living area is one option for meeting the outdoor living requirement. It is intended to allow for terraces on rooftops, not full recreational facilities, or amenities such as pools, etc. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H6. The comment states that it is a hardship to require 180 cubic feet of storage space in a structured parking building. City Staff believes it is important to provide adequate storage space for residents of multiple family residential projects. The proposed Specific Plan requirements would allow a developer to choose whether to locate the storage space in the residential unit, garage, carport, or elsewhere, as determined during project review. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H7. The comment states that the minimum private outdoor living area requirement for Multiple-Family Residential projects should be reduced from 100 square feet and a minimum dimension of 10 feet in one direction to 80 square feet and a minimum dimension of 8 feet in one direction to make it easier to lay out units. City Staff concurs and proposes to modify page 5-45 of the Specific Plan to require a minimum of 80 square feet and a minimum dimension of 8 feet in one direction for balconies. This is a more standard balcony size in multiple family residential developments. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H8. The comment notes that Specific Plan Figure 7-4 shows sidewalks being present on both sides of the street on Sultana and in good condition, however, no sidewalks exist on the west side of Sultana. Specific Plan Figure 7-4 is intended to show the ultimate sidewalk improvements that should be implemented with build out of the Specific Plan. Figure 7-4 will be revised to show Sultana as needing new sidewalks on both sides of the street. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

H9. The comment notes that 750 square feet per unit is too large for senior citizens and others and suggests smaller unit sizes and that the City regulates the maximum number of people allowed per bedroom. City Staff concurs that 750 square feet may be too large for seniors and is proposing separate development standards for Senior Housing in Specific Plan Chapter 5, Section E.5. This would allow a minimum 600 square foot unit for market-rate senior housing and a 525 square foot unit for affordable-rate senior housing. The comment does not raise new environmental information or directly challenge information provided in the Draft EIR. No further response is necessary.

13.5 ERRATA FOR FINAL EIR

The Final EIR will be a revised document that incorporates all of the changes made to the Draft EIR following the public review period. Added or modified text is double underlined (example), while deleted text is struck out (~~example~~).

Section 1.0 Executive Summary

Page 1-8 of the Draft EIR has been revised in the Final EIR, as follows:

Impacts	Mitigation Measures	Level of Significance After Mitigation
~~*Air Quality Management Plan*~~		
~~Implementation of the proposed Specific Plan could conflict with the Air Quality Management Plan.~~	~~Refer to Mitigation Measures AQ-1 through AQ-6.~~	~~Significant Unavoidable Impact.~~
~~Cumulative Impact~~		
~~Implementation of the proposed Specific Plan and other cumulative projects could result in cumulative impacts involving conflicts with applicable land use plans, policies, or regulations.~~	~~No mitigation is required.~~	~~Less Than Significant Impact.~~
Aesthetics/Light and Glare		
Short-Term Visual Character		
Grading and construction activities associated with future development could temporarily degrade the existing visual character/quality of the respective development sites and their surroundings.	AES-1 For future development located in proximity to residentially zoned properties, as deemed necessary by the City's Community Development Director, prior to issuance of the Grading Permit, construction documents shall include language that requires all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged within the project site. Staging areas shall be screened from view from residential properties. Construction worker parking may be located off-site with prior approval by the City; however on-street parking of construction worker vehicles on residential streets shall be prohibited. Vehicles shall be kept clean and free of mud and dust before leaving the development site. Surrounding streets shall be swept daily and maintained free of dirt and debris.	Less Than Significant Impact.

Section 3.0, Project Description

Exhibits 3-3, 3-5, and 3-6 in the Draft EIR will be revised in the Final EIR to reflect the District boundary modifications. The exhibits are included at the end of subsection.

Page 3-5 of the Draft EIR will be revised in the Final EIR, as follows:

DOWNTOWN DISTRICTS

Euclid District

The Euclid District extends along Euclid Avenue throughout the Plan area, excluding parcels within the Civic Center and Old Town Districts. Euclid Avenue is a 200 foot-wide State Highway that is listed on both the National Register of Historic Properties and the State List of Historic Sites. The west side of Euclid Avenue is primarily comprised of one- to two-story offices and single-family homes, many of them historic, while buildings on the east side are generally taller and contain commercial, office and industrial uses. South of the railroad tracks, the uses become less consistent, with some industrial buildings and vacant lots. Euclid Avenue serves as a primary gateway into Upland and the Downtown.

Page 3-7 of the Draft EIR will be revised in the Final EIR, as follows:

Civic Center District

This district extends from Euclid Avenue to 2nd Avenue, between Arrow Highway and D Street~~, and includes two parcels south of D Street~~. This district is considered the civic and governmental heart of Upland, home to the architecturally distinguished Upland Civic Center, an important historic building in the City and a key gateway into Downtown. Other uses include the Fire Station Headquarters, the Upland Library, and the Carnegie Cultural Center. The Historic Fire Station, which was renovated in 2010, is also located in this district, along with the former City Hall building, now the headquarters for the Scheu Manufacturing Company.

Pages 3-9 and 3-10 of the Draft EIR will be revised in the Final EIR, as follows:

Euclid District

The vision for this district is to preserve and enhance Euclid Avenue as a grand and beautiful scenic corridor with deep, landscaped setbacks on either side, and to establish a clear connection and visibility to Old Town. The connection between Euclid and Old Town would be improved through clear signage and gateways, particularly at A Street, which is the first major opportunity to see and enter Downtown for visitors coming from the south on Euclid. The Pacific Electric Trail that links the Euclid District to the Downtown would also be enhanced through clear signage, additional trees, and a crossing at Euclid Avenue. In Downtown, new

buildings on both sides of the street would further enhance the boulevard-like pedestrian feel. Along the east side, adjacent to the remainder of Downtown, new office and ~~condominium~~ mixed commercial and residential buildings would strengthen the existing pattern of buildings with deep setbacks from the street. These buildings would be sensitively scaled to match the existing buildings along Euclid Avenue. They will be stepped up from two to three stories front to back, allowing for taller buildings in the ~~back~~rear of properties~~, with three and four stories~~, as they back up to multi-story condominium buildings and parking garages on 1st Street~~, but they would be sensitively scaled to match the character of existing buildings along Euclid Avenue~~. Corner buildings would display prominent and aesthetic architecture to provide appealing and inviting gateways into Downtown. Although few new buildings would be constructed along the west side of Euclid, some older homes may be used as offices in a way that preserves their historic character. New buildings would be up to two stories high, keeping with the adjacent residential neighborhood.

Section 5.1, Land Use and Planning

Pages 5.1-16 and 5.1-17 in the Draft EIR have been revised in the Final EIR, as follows:

Preservation of Historic Resources Issue

The Land Use Element also identifies as a significant land use issue the decline of the historic residential neighborhoods situated south of Foothill Boulevard. Moreover, the Land Use Element substantiated the City's desire to establish a historic preservation program "through preservation, rehabilitation, use, and reuse of historic resources of building sites and districts." The proposed Specific Plan establishes goals and objectives that address the issue of declining historic residential neighborhoods, and recommends various policies and implementing actions that would uphold the preservation of historically significant structures and areas.

Namely, Goal 2 of the Specific Plan is to "strengthen the historic character and cultural heritage of Downtown Upland" in order to "protect, enhance, perpetuate, and adaptively reuse properties of historic, cultural, and architectural significance in Downtown (Objective 2.1). In order to accomplish this goal and objective, the Specific Plan has established the following policies and implementing actions:

Policy 2.1.1 Wherever possible, historic buildings should be reused and rehabilitated instead of being demolished to make way for new development.

Policy 2.1.2 The City shall continue to facilitate the rehabilitation and adaptive reuse of buildings that contribute to the historic character of Downtown Upland through regulatory and, where feasible, financial incentives, as set forth in Chapter 5, the Development Code.

Policy 2.1.3 Alterations to existing portions of a historic resource or additions to a historic resource shall be done in a manner that retains (repairs) and protects the existing architectural details and character-defining features, as much as possible. Necessary alterations to the existing portion of the resource and additions shall incorporate the architectural style, character defining features,

rhythm, scale, materials, texture, and colors of the existing portions of the resource.

Policy 2.1.~~3~~4 New development occurring adjacent to an historic resource shall be developed in a manner that is consistent with the design, scale and identity of the historic context.

Policy 2.1.~~4~~5 The City shall continue ongoing seismic retrofitting of older Downtown structures that do not satisfy modern earthquake standards for construction.

Policy 2.2.1 The City should encourage the preservation, maintenance and adaptive reuse of the historic citrus packing houses located in the Citrus Transportation District.

Policy 2.2.2 The City shall promote the Cooper Regional History Museum as a Downtown venue for special events, education and exhibits on the citrus heritage of Upland.

Policy 2.2.3 The City shall work with the Citrus Roots-Preserving Citrus Heritage Foundation to raise awareness of Upland's citrus heritage through education, public artwork and publications.

Policy 2.2.4 The City should encourage the incorporation of citrus heritage design elements, landscaping and/or artwork in all private and public improvements to emphasize Upland's citrus heritage.

Action 2.2.1 Conduct additional historical research on individual citrus packing houses and prepare a nomination for designation on the State/National Register of Historic Places, or as an historic district.

Action 2.2.2 When private development permits, build a "Citrus Heritage Plaza", on the southeast corner of 2nd Avenue and Stowell Street adjacent to the packing house in the Citrus Transportation District, that is designed with emblematic features, such as citrus trees, murals and plaques, to celebrate the citrus heritage of Upland.

Action 2.2.3 Develop and foster a public art program and walking tours to preserve and communicate the historical significance of Downtown Upland.

Section 5.2, Aesthetics/Light and Glare

Page 5.2-10 of the Draft EIR will be revised in the Final EIR, as follows:

Euclid District

Euclid Avenue would remain one of the most beautiful and historic boulevards in all of Southern

California, characterized by large trees and a grassy median, with stately buildings set far back from the street. In Downtown, Euclid would retain its existing character, and new buildings on both sides of the street would further enhance the boulevard-like pedestrian feel. Along the east side, adjacent to the remainder of Downtown, new buildings would strengthen the existing pattern of buildings with deep setbacks from the street. These buildings would be sensitively scaled to match the existing buildings along Euclid Avenue. They will be stepped up from two to three stories front to back, allowing for taller buildings in the rear of properties. ~~These buildings would be taller in the back, with three and four stories,~~ as they back up to multi-story condominium buildings and parking garages on 1st Street. ~~However, these would be scaled to match the character of existing buildings along Euclid Avenue.~~ Corner buildings would display prominent and aesthetic architecture to provide gateways into Downtown. Specific Plan Figure 3-2 illustrates before and after perspectives of development at the intersection of Euclid Avenue and A Street. Few new buildings would be constructed along the west side of Euclid, although some older homes may be reused as offices such that their historic character would be preserved. The new buildings would be a maximum of two stories in height, keeping with the adjacent residential neighborhood.

Section 5.8, Cultural Resources

Pages 5.8-19 and 5.8-20 of the Draft EIR have been revised in the Final EIR, as follows:

Goal 2 of the Specific Plan is to "strengthen the historic character and cultural heritage of Downtown Upland" in order to "protect, enhance, perpetuate, and adaptively reuse properties of historic, cultural, and architectural significance in Downtown (Objective 2.1). In order to accomplish this goal and objective, the Specific Plan has established the following policies and implementing actions:

Policy 2.1.1 Wherever possible, historic buildings should be reused and rehabilitated instead of being demolished to make way for new development.

Policy 2.1.2 The City shall continue to facilitate the rehabilitation and adaptive reuse of buildings that contribute to the historic character of Downtown Upland through regulatory and, where feasible, financial incentives, as set forth in Chapter 5, the Development Code.

Policy 2.1.3 Alterations to existing portions of a historic resource or additions to a historic resource shall be done in a manner that retains (repairs) and protects the existing architectural details and character-defining features, as much as possible. Necessary alterations to the existing portion of the resource and additions shall incorporate the architectural style, character defining features, rhythm, scale, materials, texture, and colors of the existing portions of the resource.

Policy 2.1.~~3~~4 New development occurring adjacent to an historic resource shall be developed in a manner that is consistent with the design, scale and identity of the historic context.

Policy 2.1.45	The City shall continue ongoing seismic retrofitting of older Downtown structures that do not satisfy modern earthquake standards for construction.
Policy 2.2.1	The City should encourage the preservation, maintenance and adaptive reuse of the historic citrus packing houses located in the Citrus Transportation District.
Policy 2.2.2	The City shall promote the Cooper Regional History Museum as a Downtown venue for special events, education and exhibits on the citrus heritage of Upland.
Policy 2.2.3	The City shall work with the Citrus Roots-Preserving Citrus Heritage Foundation to raise awareness of Upland's citrus heritage through education, public artwork and publications.
Policy 2.2.4	The City should encourage the incorporation of citrus heritage design elements, landscaping and/or artwork in all private and public improvements to emphasize Upland's citrus heritage.
Action 2.2.1	Conduct additional historical research on individual citrus packing houses and prepare a nomination for designation on the State/National Register of Historic Places, or as an historic district.
Action 2.2.2	When private development permits, build a "Citrus Heritage Plaza", on the southeast corner of 2nd Avenue and Stowell Street adjacent to the packing house in the Citrus Transportation District, that is designed with emblematic features, such as citrus trees, murals and plaques, to celebrate the citrus heritage of Upland.
Action 2.2.3	Develop and foster a public art program and walking tours to preserve and communicate the historical significance of Downtown Upland.

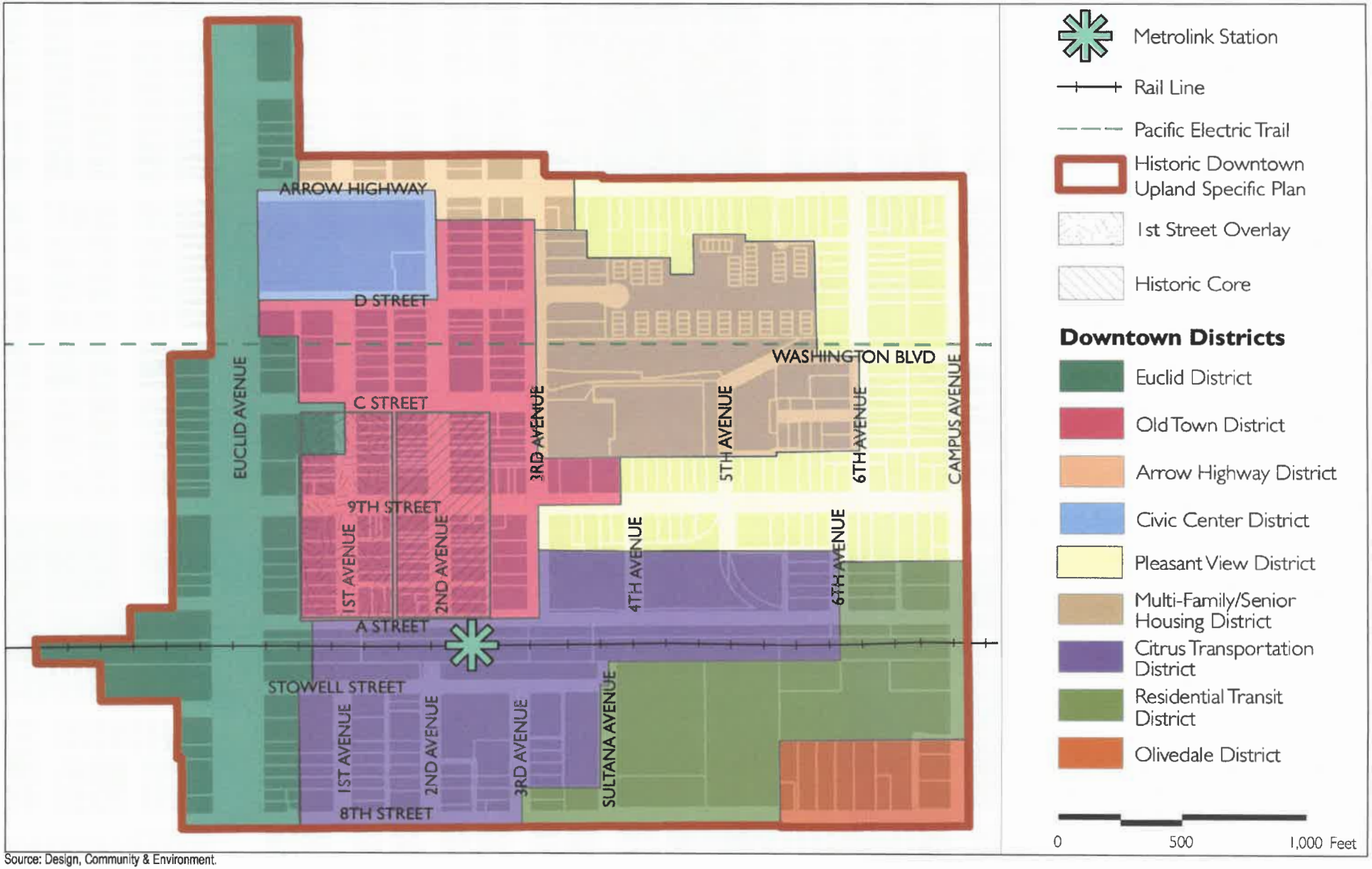
Page 5.8-22 of the Draft EIR will be revised in the Final EIR, as follows:

As stated, Euclid Avenue is located on the National Register. Euclid Avenue is located within the proposed Euclid District. The Specific Plan identifies the potential for new office and mixed commercial and residential ~~condominium~~ buildings along the east side of Euclid Avenue, adjacent to Downtown. The building would have deep setbacks from the street, similar to existing development. These buildings would be sensitively scaled to match the existing buildings along Euclid Avenue. They will be stepped up from two to three stories front to back, allowing for taller buildings in the rear of properties. ~~The buildings would be taller in the back, with three and four stories,~~ as they back up to multi-story condominium buildings and parking garages on 1st Street. ~~The proposed buildings would be scaled to match the character of existing buildings along Euclid Avenue.~~ It is anticipated that few new buildings would be constructed along the west side of Euclid Avenue; although some older homes may be used for offices in a way that preserves their historic character (refer to the discussion of adaptive reuse above). Any new buildings constructed along the west side of Euclid Avenue would be two

stories in height, consistent with the residential neighborhood to the west. The proposed Specific Plan Development Code and Design Standards & Guidelines establish development standards and design standards and guidelines for the Euclid District. The intent is to ensure that Euclid Avenue remains a stately boulevard with deep landscaped setbacks and historic buildings, and that if forms a gateway into Downtown at key intersections. Compliance with the City's Municipal Code and the proposed Specific Plan Historic Preservation and Adaptive Reuse requirements, Development Code and the Design Standards & Guidelines would reduce potential impacts to Euclid Avenue to a less than significant level. Additionally, the Specific Plan proposes a crossing for the Pacific Electric Trail at Euclid Avenue. The potential crossing treatments that would be used to provide a mid-block crossing for pedestrians and bicyclists include either overhead beacons or in-pavement flashers. The provision of a mid-block crossing would not alter the overall character of Euclid Avenue. Impacts would be less than significant in this regard.

Section 5.11, Schools

Section 5.11 of the Draft EIR will be revised in the Final EIR to include the Ontario-Montclair School District and Chaffey Joint Union High School District. The complete section with revisions is included at the end of this subsection.



Source: Design, Community & Environment.

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PROGRAM ENVIRONMENTAL IMPACT REPORT
HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN

Regulating Plan

Exhibit 3-3

Source: Design, Community & Environment.

RBF CONSULTING

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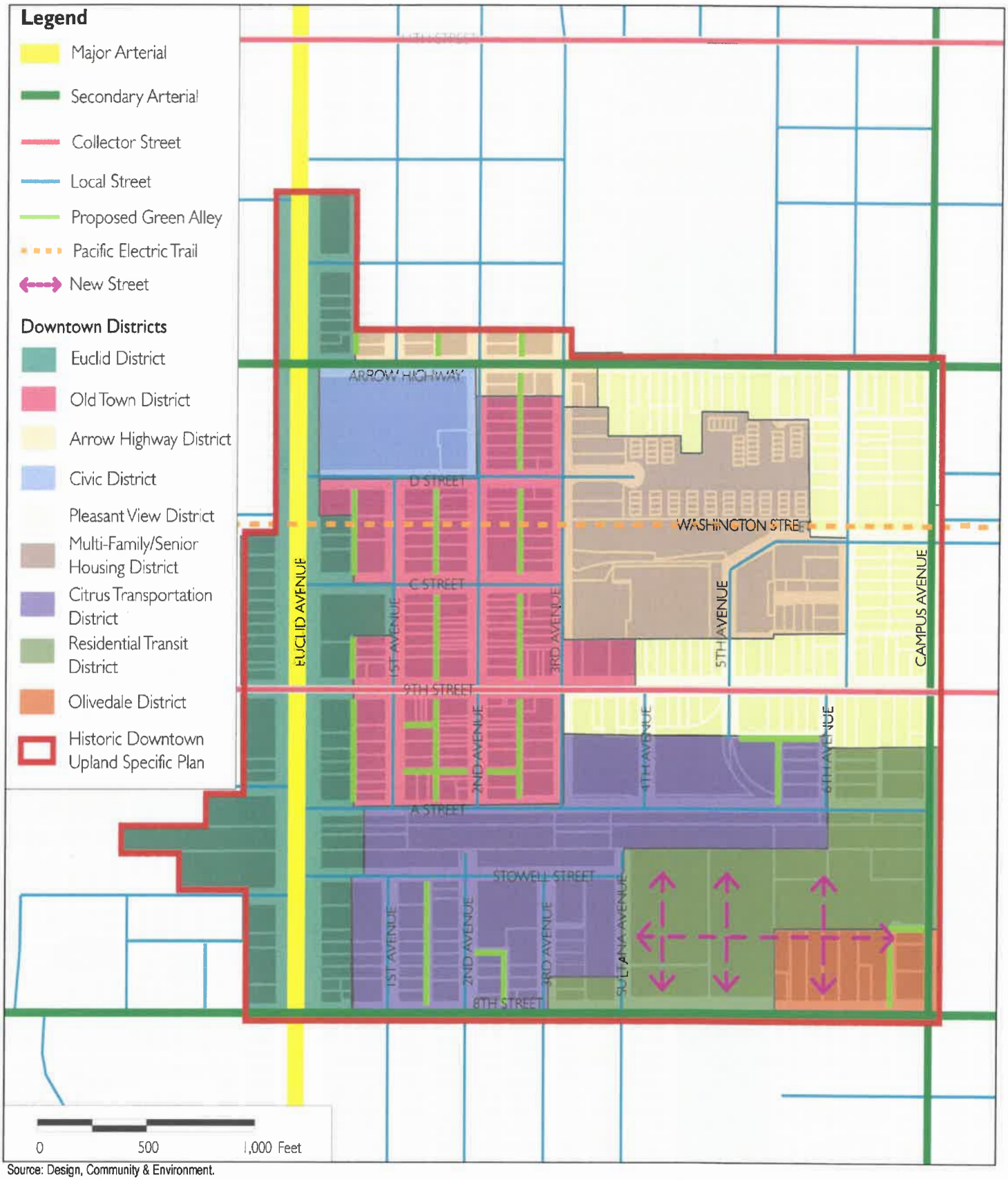
PROGRAM ENVIRONMENTAL IMPACT REPORT
HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN

Concept Plan

Exhibit 3-5



Source: Design, Community & Environment.

PROGRAM ENVIRONMENTAL IMPACT REPORT
HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN

Street Network

Exhibit 3-6

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Section 5.11
SCHOOLS

This section evaluates impacts of the proposed project on schools within the Upland Unified School District, Ontario-Montclair School District, and Chaffey Joint Union High School District, which serve the Historic Downtown Upland Specific Plan area. Information in this section is based upon information from the respective Districts; refer to Appendix I.

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5.11.1 EXISTING SETTING

Students residing within the Plan area attend schools within the Upland Unified School District Ontario-Montclair School District, and Chaffey Joint Union High School District. Table 5.11-1, *School Information*, identifies the location and current enrollment for the schools currently serving the Plan area.

Table 5.11-1
School Information

School	Location	Current Enrollment
Upland Unified School District[1]		
Upland High School	565 West 11th Street	3,410
Hillside High School	1558 West 9th Street	225
Upland Junior High	444 East 11th Street	916
Baldy View Elementary	979 West 11th Street	699
Citrus Elementary	925 West 11th Street	702
Upland Elementary	601 North 5th Avenue	554
Ontario-Montclair School District[2]		
Edison Elementary	515 East 6th Street	629
Arroyo Elementary	1700 E 7th Street	518
Vina Danks Middle School	1020 North Vine Avenue	1,034
Chaffey Joint Union High School District[3]		
Chaffey High School	1245 N. Euclid Avenue	3,597

Note: Upland Unified School District enrollment is based upon 2009-2010 enrollment numbers. Ontario-Montclair School District enrollment is based upon 2011 enrollment numbers. Chaffey Joint Union High School District enrollment is based on 2010-2011 school year.

Source:
1. Jammee Digon, Administrative Assistant – Business Services, Upland Unified School District, May 13, 2010.
2. Maira Millan, Accounting Supervisor, Facilities Planning and Operations, Ontario-Montclair School District, March 30, 2011.
3. Mike Harrison, Director Operations and Planning, Chaffey Joint Union High School District.

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Table 5.11-2, *Upland Unified School District Capacity and Enrollment*, identifies the capacities and enrollment for the Upland Unified School District by school level.

As indicated in Table 5.11-2, the Upland Unified School District does not have adequate capacity at the Elementary Schools (K-3); High Schools (9-12); and Special Education School to serve its student population. Currently, the District does not have plans to construct any new facilities within the Plan area.

Generation rates are the most common method used by a school district to project future enrollment. Student generation rates for the Upland Unified School District are 0.64 students per single-family residential dwelling unit and 0.25 students for multiple-family residential dwelling units.

Table 5.11-2
Upland Unified School District Capacity and Enrollment (2007-2008)

School Level	School Capacity	School District Enrollment	Excess (Shortage) Capacity
Elementary School K-3	3,060	3,328	(268)
Elementary School 4-6	3,125	2,684	441
Junior High School 7-8	2,015	1,996	19
High School 9-12	3,726	3,894	(168)
Special Education	144	252	(108)
Source: Jammee Digon, Administrative Assistant – Business Services, Upland Unified School District, May 13, 2010.			

Table 5.11-3, *Ontario-Montclair School District Capacity and Enrollment*, identifies the capacities and enrollment for the schools within the Ontario-Montclair School District that serve the Plan area.

Table 5.11-3
Ontario-Montclair School District Capacity and Enrollment (2011)

School Level	School Capacity	School Enrollment	Excess (Shortage) Capacity
Edison Elementary	677	629	48
Arroyo Elementary	805	518	287
Vina Danks Middle School	1,330	1,034	296
Source: Maira Millan, Accounting Supervisor, Facilities Planning and Operations, Ontario-Montclair School District, March 30, 2011.			

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As indicated in Table 5.11-3, the schools within the Ontario-Montclair Unified School District that serve the Plan area have adequate capacity to serve its student population.

Student generation rates for the Ontario-Montclair School District are 0.298 students per single-family attached residential dwelling unit, 0.595 students per single-family detached residential dwelling unit, and 0.298 students for multiple-family residential dwelling units.

As indicated in Table 5.11-1, Chaffey High School current enrollment is 3,597 students. According to the school district there is capacity to serve additional students.

Student generation rates for Chaffey Joint Union High School District are 0.1963 students per single-family detached residential dwelling unit, 0.0629 students per single family attached residential dwelling unit, and 0.0874 students per multiple-family residential dwelling units.

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5.11.2 REGULATORY FRAMEWORK

AB 2926

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill 2926 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

SENATE BILL (SB) 50

Senate Bill 50 (SB 50) and Proposition 1A, both of which passed in 1998, provided a comprehensive school facilities financing and reform program, in part by authorizing a $9.2 billion school facilities bond issue, school construction cost containment provisions and an eight-year suspension of the Mira, Hart and Murrieta court cases. Specifically, the bond funds are to provide $2.9 billion for new construction and $2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate, and reinstates the school facility fee cap for legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart and Murrieta court cases. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions are in effect until 2006 and will remain in place as long as subsequent State bonds are approved and available.

SB 50 establishes three levels of Developer Fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. Level One Fees are the statutory fees, which can be adjusted for inflation every two years. Level Two Fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. Level Three Fees come into effect if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies. The school fee amounts provided for in Government Code Sections 65995, 65995.5 and 65995.7 would constitute full and complete mitigation for school facilities.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts, and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

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5.11.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Upland in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to schools. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.11.4 IMPACTS AND MITIGATION MEASURES

SCHOOL FACILITIES

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT COULD IMPACT EXISTING SCHOOL FACILITIES WITHIN THE UPLAND UNIFIED SCHOOL DISTRICT ONTARIO-MONTCLAIR SCHOOL DISTRICT, AND CHAFFEY JOINT UNION HIGH SCHOOL DISTRICT.**

Impact Analysis: Development associated with implementation of the Historic Downtown Upland Specific Plan would allow for 1,150 additional multi-family residential units at buildout. The development of new residential units within the Plan area would result in an associated increase in students attending schools within the Upland Unified School District Ontario-Montclair School District, and Chaffey Joint Union High School District.

Table 5.11-4, *Estimated Student Generation*, provides the number of students that could potentially be generated as a result of the proposed project, based upon the generation rates provided by Upland Unified School District, Ontario-Montclair School District and Chaffey Joint Union High School District.

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Table 5.11-4
Estimated Student Generation

Dwelling Unit Type	Student Generation Factor	Number of Residential Units	Number of Students Generated
Upland Unified School District			
Single-Family	0.64	(18)	(12)
Multiple-Family	0.25	1,150	288
Total			**276**
Ontario-Montclair School District			
Single-Family Detached	0.595	(18)	(11)
Multiple-Family	0.298	1,150	343
Total			**332**
Chaffey Joint Union High School District			
Single-Family Detached	0.1963	(18)	(4)
Multiple-Family	0.0874	1,150	101
Total			**97**

Source: Jammee Digon, Administrative Assistant – Business Services, Upland Unified School District, May 13, 2010.
Maira Millan, Accounting Supervisor, Facilities Planning and Operations, Ontario-Montclair School District, March 30, 2011.

As indicated in Table 5.11-4, with implementation of the proposed project, a total of 276, 332, or 97 school students could be added to the Plan area based upon Upland Unified School District, Ontario-Montclair School District, and Chaffey Joint Union high School District student generation rates, respectively. The Specific Plan establishes a buildout range for residential dwelling units within the Plan area. The specific number of residential dwelling units that would occur within each school district service area is not currently known. For purposes of this analysis, Table 5.11-4 calculates student generation for each school district assuming all of the new students potentially generated within the Plan area would attend one school district. However, it is anticipated that future students within the Plan area would attend multiple school districts.

As indicated in Table 5.11-2, the Upland Unified School District does not have adequate capacity to serve its student population. Table 5.11-3 indicates that Ontario-Montclair School District has available capacity to serve its student population. Chaffey Joint Union High School District has indicated that adequate capacity is available to serve its student population. It should be noted that buildout of the Specific Plan is anticipated to occur in phases over several years, based on market demand; thus, any increase in demand for school services would occur gradually as additional development is added to the area.

In order to maintain adequate classroom seating and facilities standards, individual development projects would be required to pay statutory fees to the school districts serving the project area in order to compensate for the impacts of development on school capacities. The Upland Unified School District currently assesses developer fees of $2.97 per square feet of living space for residential development and $0.47 per square foot for commercial/industrial development. The Ontario-Montclair School District currently assesses developer fees of $3.75 per square foot of living space for residential development and $0.32 per square foot for

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commercial/industrial development. The Chaffey Joint Union High School District currently assesses developer fees of $1.07 per square foot of living space for residential development and $0.15 per square foot for commercial development.

Pursuant to SB 50, payment of fees to the School Districts is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Therefore, project applicants would be required to pay the statutory fees, so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

Mitigation Measures:

SCH-1 Individual project applicants shall pay all applicable Development Impact Fees to the appropriate school district(s) prior to final project approval and issuance of certificates of occupancy. Proof of fee payment shall be provided to the City of Upland.

Deleted: Upland Unified School District

Level of Significance: Less Than Significant Impact.

5.11.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO SCHOOL FACILITIES SERVICING THE CITY OF UPLAND.**

Impact Analysis: Development of the proposed project and related cumulative projects would potentially generate new students to the City. Individual development projects would be required to pay school impact fees based on the type and size of development proposed. Pursuant to SB 50, payment of fees to the Upland Unified School District, Ontario-Montclair School District, and/or Chaffey Joint Union High School District are considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Therefore, individual project applicants would be required to pay the statutory fees, so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students. Development of the proposed project would not result in significant cumulative impacts in regards to school services and facilities.

Deleted:

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

5.11.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts to schools resulting from implementation of the proposed project would be less than significant with adherence to the identified mitigation measure. As such, no significant unavoidable school impacts would result from implementation of the Historic Downtown Upland Specific Plan.

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APPENDIX A
Initial Study/Notice of Preparation

NOTICE OF PREPARATION
FOR A DRAFT ENVIRONMENTAL IMPACT REPORT

TO: Interested Parties

DATE: November 16, 2009

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the Historic Downtown Upland Specific Plan Project.

CEQA Staff Contact: Sylvia Scharf, AICP, Planning Manager, Community Development Department

LEAD AGENCY: City of Upland, 460 North Euclid Avenue, Upland, California 91785
Phone (909) 931-4130, FAX (909) 931-4321, Email: sscharf@ci.upland.ca.us

The City of Upland is commencing with preparation of a Draft Environmental Impact Report for the Historic Downtown Upland Specific Plan project, and has released this Notice of Preparation (NOP) per the requirements of the California Environmental Quality Act (CEQA).

The City wants to know your views and your specific concerns related to the potential environmental effects of the project. Information gathered during the NOP comment period will be used to shape and focus future analyses of environmental impacts.

If you are a public agency, the City is interested in the views of your agency as to the scope and content of the environmental information germane to your agency's statutory responsibilities. As a responsible or trustee agency, your agency may need to use the EIR prepared by the City when considering issuance of a permit or other approval for the project.

NOP COMMENT PERIOD:

The City invites you to submit written comments describing your specific environmental concerns, and if representing a public agency, please identify your specific areas of statutory responsibility. Written comments are desired at the earliest possible date, but due to the time limits mandated by State law, your response must be sent no later than 30 days after receipt of this notice. **The NOP public comment period begins on November 16, 2009 and ends on December 15, 2009.** Please send your written comments to the City staff contact identified above, and please include your name, address, and contact information in your correspondence.

DOCUMENT AVAILABILITY:

The project description, location, and potential environmental effects are described below. An Initial Study (which provides a preliminary analysis of the environmental effects of the project) has also been prepared. Copies of the Initial Study are transmitted with this notice to the Office of Planning and Research and to each responsible and trustee agency. Copies of the Initial Study are available for public review on the City's website at www.ci.upland.ca.us, and at the following locations:

- Upland City Hall, Community Development Department, 460 North Euclid Avenue, Upland, California 91785
- Upland City Library, 450 North Euclid Avenue, Upland, California 91785

PROJECT LOCATION:

The project area consists of 210 acres and is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east, and Euclid Avenue to the west. The project area boundary extends north of Arrow Highway along Euclid Avenue and slightly west of Euclid Avenue, between Euclid Lane and Vernon Drive.

PROJECT DESCRIPTION:

The Historic Downtown Upland Specific Plan (Specific Plan) provides permitted uses, development standards, and design guidelines to guide development within nine districts to achieve the overall vision for the Specific Plan area. The Specific Plan proposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. The Specific Plan would allow for a maximum of 518,433 square feet of commercial/retail uses, 186,095 square feet of office uses, 50,000 square feet of commercial/flex uses, 63,255 square feet of public/institutional uses, 46,762 square feet of industrial uses, 29,907 square feet of public open space uses, and 1,320 dwelling units at buildout. The estimated buildout numbers are based on the likelihood of new development that would occur within the Specific Plan area over the next twenty years, to approximately 2030.

SUMMARY OF PROBABLE ENVIRONMENTAL EFFECTS:

Implementation of the proposed project may result in significant environmental effects in the areas of aesthetics, air quality, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. These potential environmental effects are described in greater detail in the Initial Study prepared for the project. An EIR will be prepared to evaluate the project's potential impacts on the environment and analyze alternatives.

INITIAL STUDY

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN

LEAD AGENCY:

City of Upland

460 North Euclid Avenue
Upland, California 91785
Contact: Ms. Sylvia Scharf, AICP
909.931.4141

PREPARED BY:

RBF Consulting

14725 Alton Parkway
Irvine, California 92718
Contacts: Mr. Glenn Lajoie, AICP
949.472.3505

November 16, 2009

JN 10-105851

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1.0 INTRODUCTION

The proposed Historic Downtown Upland Specific Plan Project (project) encompasses approximately 210 acres generally bounded by Arrow Highway on the north, Campus Avenue on the east, 8th Street on the south, and Euclid Avenue on the west, in the City of Upland. The project area boundary extends north of Arrow Highway, along Euclid Avenue, and slightly west of Euclid Avenue, between Euclid Lane and Vernon Drive. Project implementation would involve the development of residential, commercial, office, public/institutional, industrial, public open space, and parking uses within Downtown Upland. Refer to Section 2.0, *Project Description*, for a detailed project description.

Following preliminary review of the proposed project, the City of Upland has determined that the Historic Downtown Upland Specific Plan (Specific Plan) is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect and cumulative environmental effects associated with the proposed project.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Section 21000 - 21178.1), this Initial Study has been prepared to analyze the proposed project in order to identify any potentially significant impacts upon the environment that would result from construction and implementation of the project. In accordance with Section 15063 of the *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of Upland, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration or Environmental Impact Report (EIR) would be required for the proposed Historic Downtown Upland Specific Plan project. The purpose of this Initial Study is to inform the City of Upland decision-makers, affected agencies and the public of potential environmental impacts associated with construction and implementation of the proposed project.

Following completion of the Initial Study, the City of Upland will make a formal determination as to whether the project may or may not have significant unmitigable environmental impacts. A determination that a project may have less than significant effects would result in the preparation of a Negative Declaration. A determination that a project may have significant impacts on the environment would require the preparation of an EIR to further evaluate issues identified in this Initial Study. Based upon the potential environmental effects, the City will require preparation of an EIR to further evaluate issues identified in this Initial Study. Therefore, this Initial Study and Notice of Preparation (NOP) serves as part of the scoping process to determine the appropriate environmental documentation for the project. As indicated in Section 3.3, *Lead Agency Determination*, the Lead Agency has determined that the proposed project may have a significant effect on the environment and that preparation of an EIR is required.

The Initial Study and NOP will undergo a 30-day public review period. During this review, comments by the public and responsible agencies on the project relative to environmental issues are to be submitted to the City of Upland. The City will review and consider all comments as a part of the project's environmental analysis, as required in Section 15082 of the *CEQA Guidelines*, as amended. The comments received with regard to this NOP and Initial Study will be included in the project environmental document, for consideration by the City of Upland.

1.2 CONSULTATION

In accordance with Section 15063 of the *CEQA Guidelines*, as soon as the Lead Agency has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies on the environmental documentation to be prepared for the project. Following receipt of any written comments from those agencies, the City of Upland will consider any recommendations of those agencies in the formulation of the preliminary findings. Following execution of this Initial Study, the City of Upland will initiate formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.3 INCORPORATATION BY REFERENCE

The following references were utilized during preparation of this Initial Study. These documents are available for review at the City of Upland Community Development Department, located at 460 North Euclid Avenue, Upland, California, 91785.

- *City of Upland General Plan* (General Plan), adopted June 1982 with subsequent updates compiled July 1992. The City's General Plan identifies the desired future relationship between people and their needs. The purpose of the General Plan is to provide a general, comprehensive, and long-range guide for community decision-making. The Upland General Plan is comprised of the following elements:

    - Land Use Element
    - Housing Element
    - Circulation Element
    - Scenic Highways Element
    - Seismic Safety/Safety Element
    - Open Space/Conservation Element
    - Noise Element

    The analysis of existing conditions and potential project impacts included in this Initial Study incorporates information from all elements of the General Plan.

- *City of Upland Municipal Code* (Municipal Code). The Municipal Code consists of all the regulatory, penal, and administrative ordinances of the City of Upland. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. The City of Upland Planning and Zoning Code (Title 17 of the Municipal Code) identifies permitted and prohibited land uses, as well as development standards according to the zoning category of particular parcels.

- *San Bernardino County Operation Area Multi-Jurisdictional Hazard Mitigation Plan*, April 2005. The San Bernardino County Operation Area Multi-Jurisdictional Hazard Mitigation Plan (HMP) is a multi-jurisdictional plan that encourages all local governments to work together to reduce or prevent injury and damage from natural disaster. The HMP directly responds to the Disaster Mitigation Act of 2000 (DMA 2000), which requires local governments, as a condition of receiving federal disaster mitigation funds, to have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identifying and prioritizing mitigation actions, encouraging the

development of local mitigation, and providing technical support for those efforts. The HMP focuses on the top three natural hazards found in the County: earthquake, wildfire, and flood and contains a summary of information from each jurisdiction covered by the HMP.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

This section describes the regional and local setting of the Specific Plan area (Plan area), as well as the characteristics of the Plan area.

PROJECT LOCATION

The proposed Plan area is located within the City of Upland, San Bernardino County, California as shown in Exhibit 2-1, *Regional Vicinity*. It consists of 210 acres and is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east, and Euclid Avenue to the west. The Plan area boundary extends north of Arrow Highway along Euclid Avenue and slightly west of Euclid Avenue, between Euclid Lane and Vernon Drive.

Regional access to the Plan area is provided via Interstate 10, approximately 1.5 miles to the south; Interstate 210, approximately 2.5 miles to the north; and Foothill Boulevard, also known as State Route 66. The primary roadways providing access to the Plan area are Euclid Avenue, Arrow Highway, Campus Avenue, and 8th Street. The Plan area is also served by the Metrolink commuter rail line that provides service to San Bernardino, Los Angeles, Riverside and Orange Counties. The Upland Metrolink Station is located within the project area on 2nd Avenue and A Street. Bus service is provided by Omnitrans with three bus lines that have stops within the Plan area. The bus stops are located on Euclid Avenue (Line 83 Upland-Euclid-Chino), Arrow Highway (Line 68 Chino-Montclair-Chaffey College), and North Campus Avenue (Line 63 Chino-Ontario-Upland).

PLAN AREA CHARACTERISTICS

The current General Plan land use designations for the Plan area consist of Central Trading (CT), Office Only (CO), Single-Family Residential (4-6 dwelling units/acre), Multi-Family Residential (12-20 dwelling units/acre), Civic, Light Industrial (IL) and Transit Commercial (TC). The existing land uses within the Plan area include commercial, office and professional, special/institutional, multi-family housing, single-family housing and industrial. There are also large vacant or underutilized parcels and surface parking lots within the Plan area. A map of the existing land uses is shown in Exhibit 2-2, *Existing Land Uses*.

SURROUNDING USES

The primary use surrounding the Plan area is single-family residential. Additional uses include the Upland Elementary School, located on Arrow Highway just north of the Plan area, and Olivedale Park and Warders Field Park, located directly south and east of the Plan area, respectively.

2.2 PURPOSE OF THE SPECIFIC PLAN

The Specific Plan provides a clear framework for future development and public improvements in Downtown Upland. The Specific Plan will serve as a tool for the City to encourage economic revitalization and create a walkable, vibrant, transit-oriented downtown for Upland. The Specific Plan outlines a community-driven vision for the future of Downtown Upland and establishes a policy and regulatory framework with a set of recommendations to achieve this vision.

NOT TO SCALE

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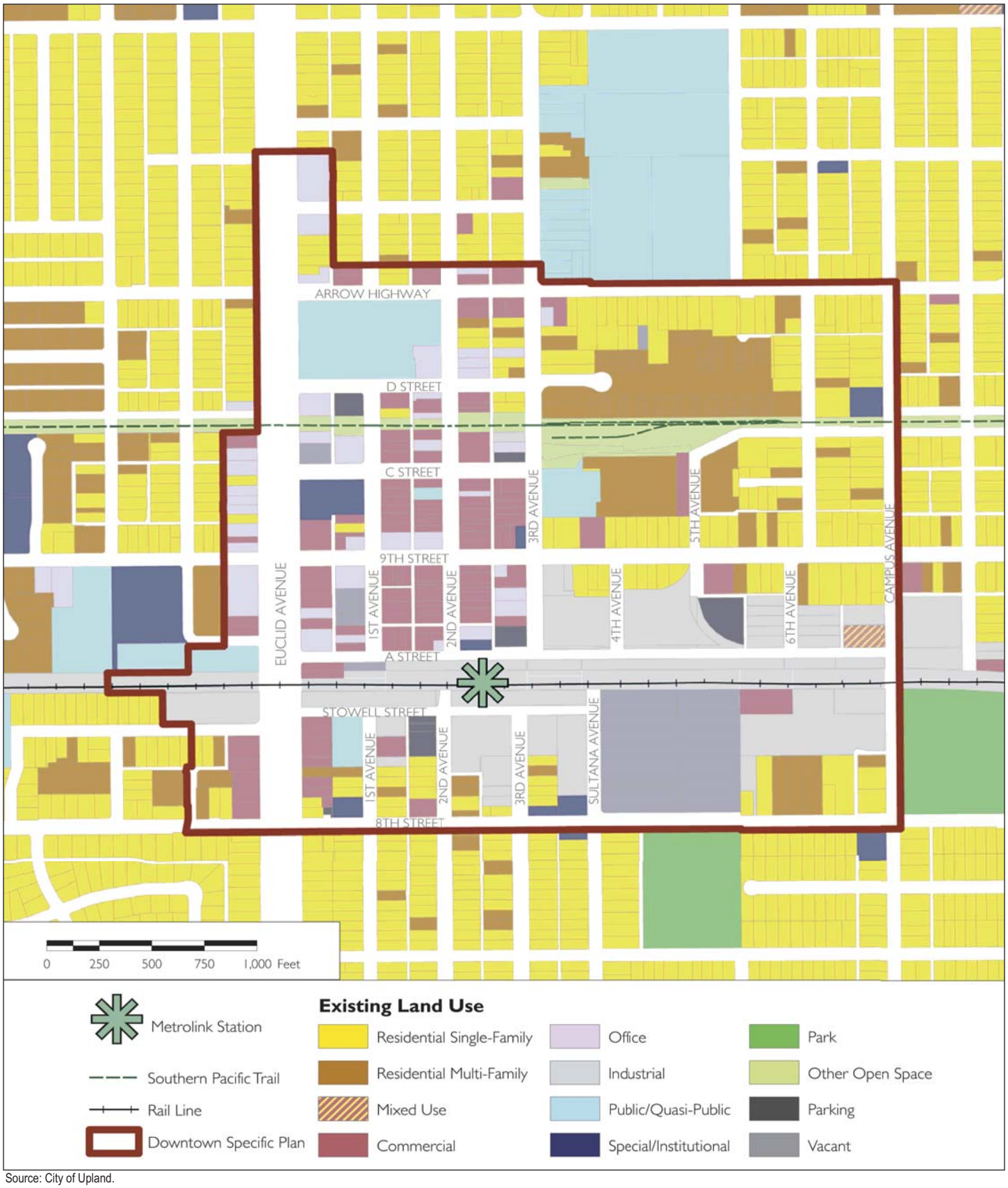
INITIAL STUDY
HISTORIC DOWNTOWN UPLAN SPECIFIC PLAN

Regional Vicinity

Exhibit 2-1



Source: City of Upland.

INITIAL STUDY
HISTORIC DOWNTOWN UPLAN SPECIFIC PLAN

Existing Land Uses

Exhibit 2-2

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2.3 SPECIFIC PLAN OBJECTIVES

A community-driven planning process was undertaken to develop a clear vision for the Plan area. This process involved members of the community, and key stakeholders. Based on feedback received during this process, a Specific Plan was developed to accomplish the following objectives.

- Educate and inform the public about the vision, goals, policies, and standards for the Plan area.
- Establish a land use plan and policy framework that will guide future development and redevelopment within the Plan area.
- Facilitate increased vibrancy in the Plan area by encouraging new development, including mixed-use development.
- Dedicate a community gathering place and/or park within the Plan area.
- Preserve key resources and historic structures existing in the Plan area.
- Improve connections, including motorized, pedestrian, and bicycle connections within the Plan area and from the Plan area to adjacent neighborhoods.
- Provide a development framework that supports transit-oriented development (TOD) in the Plan area.
- Develop and implement urban design standards that promote walkable, economically viable and vibrant environments within the Plan area.
- Prepare an environmental review document (Program EIR) to facilitate subsequent project reviews.
- Identify a procedural framework that will allow for implementation of the Specific Plan.

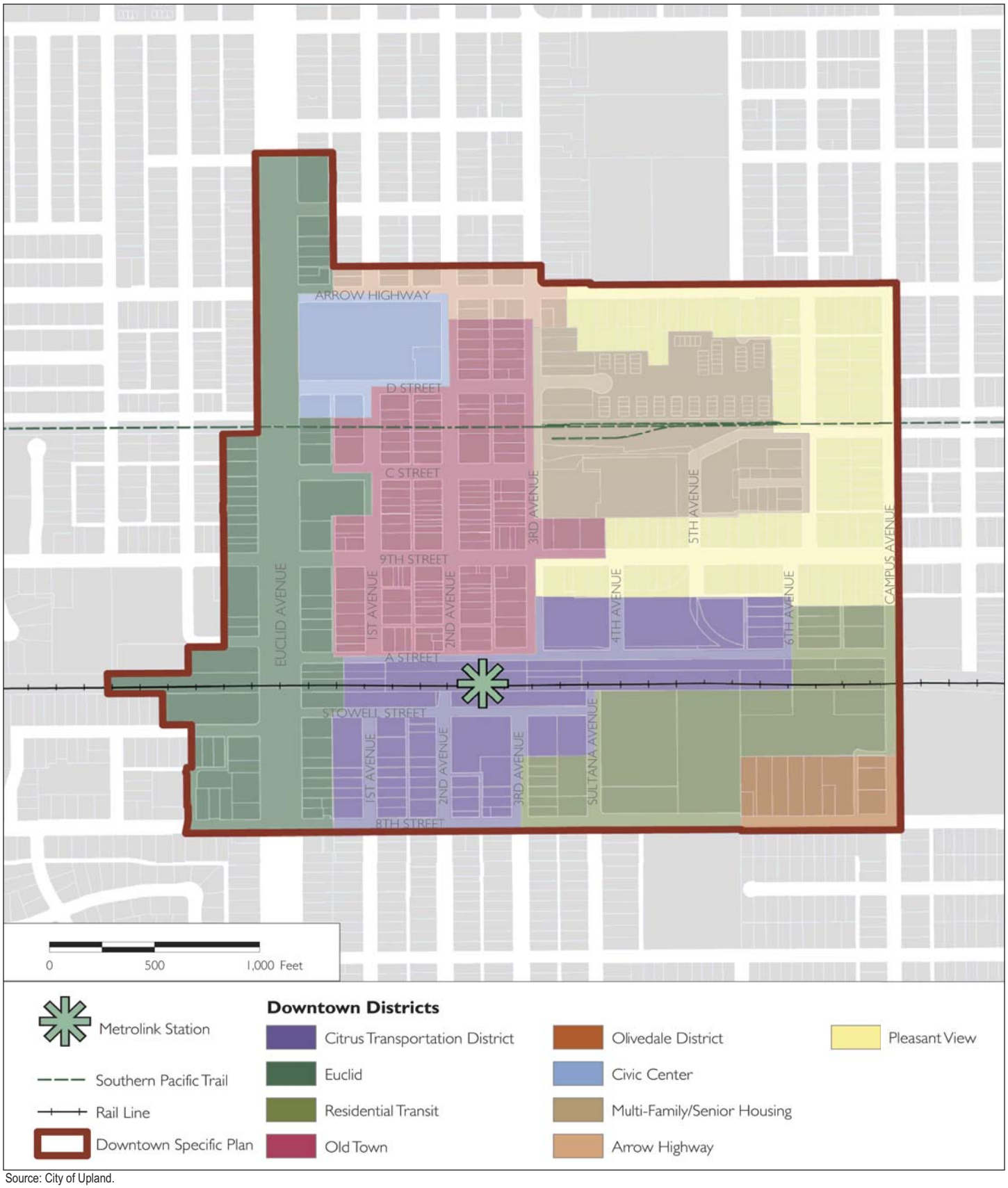
2.4 PROPOSED PROJECT

DOWNTOWN DISTRICTS

The Plan area is divided into nine districts, shown in Exhibit 2-3, *Downtown Districts*. The Specific Plan contains permitted uses, development standards, and design guidelines to guide development within each of the nine districts to achieve the overall vision for the Plan area. An overview of the permitted uses and overall vision for each district are provided below.

- Arrow Highway District is the smallest district, composed of parcels along Arrow Highway, from east of Euclid Avenue to just past 3rd Avenue. Land uses that are permitted here include commercial, office, residential and mixed-use. The overall vision for this district is to retain the commercial and offices along this corridor while improving the compatibility with the surrounding neighborhoods and connections to the Civic Center. Encouraging mixed-use development that allows residential or office to be combined with retail on the ground floor, in addition to enhancing the streetscape and pedestrian crossings in this area, would help achieve the vision for this district.

- Civic Center District extends from Euclid Avenue to 2nd Avenue, between Arrow Highway and D Street, and includes two parcels south of D Street. Permitted uses include office and public/quasi-public uses such as the City Hall, Library, and School District offices. The vision for the Civic Center District is to retain the existing government and office center, and enhance linkages between the Civic Center and the rest of Downtown. There is an opportunity to improve the gateways on D Street and 2nd Avenue to enhance linkages and attract visitors into Old Town.



Source: City of Upland.

- Pleasant View District is a single-family residential neighborhood surrounding the Multi-Family/Senior District between Arrow Highway and the packing houses south of 9th Street. This district would remain a historical single-family residential neighborhood with standards and guidelines to preserve, enhance and reinforce the existing small scale, historic and eclectic character of the neighborhood. Pedestrian connectivity would be improved with an enhanced streetscape and signage to draw residents into the Old Town and Citrus Transportation Districts.

- Multi-Family/Senior District is surrounded by the Pleasant View and Old Town Districts and includes the George M. Gibson Senior Center, senior housing, and multi-family housing. This district would remain essentially the way it is today; however, better connectivity to Old Town is envisioned through enhanced streetscape, signage, and access for seniors. Enhancing the Pacific Electric Trail that passes through this District with additional trees, benches, and access points would also provide additional amenities and foster connections to other districts in Downtown.

- Old Town District is the heart of Downtown Upland, from A Street in the south to the Civic Center and Arrow Highway districts in the north. This district begins east of Euclid Avenue and extends to 3rd Avenue, including three parcels east of 3rd Avenue. The permitted land uses include commercial, office, mixed-use and residential, with an emphasis on restricting ground-floor uses to retail and restaurants along 9th Street and 2nd Avenue within the historic core. The vision for Old Town is to retain the historic main street quality, while also increasing the population living in this area to create a vibrant, pedestrian-oriented, retail and entertainment hub in Downtown Upland. The numerous development opportunity sites within Old Town would be redeveloped into mixed-use residential properties that would follow development standards and design guidelines to ensure the character of Old Town is retained. Parking structures with a ground-floor retail wrap would provide opportunities for visitors to “park once” and shop, while freeing up surface parking for infill development. The streetscape would be enhanced, particularly along A Street to foster a walking corridor, and public alleys would be “greened” to enrich the pedestrian experience.

- Euclid District extends along Euclid Avenue throughout the study area, excluding the parcels within the Civic Center District. The uses along Euclid Avenue include commercial, office, residential, and mixed-use. The Euclid District serves a very important role in the Downtown as it is a historic, major north-south thoroughfare in the City, forms the western edge of Downtown, and has a great potential to draw visitors into Downtown. The vision for this district is to preserve and enhance Euclid Avenue as a grand and beautiful scenic corridor with deep, landscaped setbacks on either side, and to establish a clear connection and visibility to Old Town. The connection between Euclid and Old Town would be improved through clear signage and gateways, particularly at A Street, which is the first major opportunity to see and enter Downtown for visitors coming from the south on Euclid. The Pacific Electric Trail that links the Euclid District to the Downtown would also be enhanced through clear signage, additional trees, and a crossing at Euclid Avenue.

- Citrus Transportation District extends along the Metrolink train tracks from the Euclid District to the Residential Transit District. The core of Downtown would extend into this district, along 2nd Avenue and A Street, with additional mixed-use, entertainment, and commercial buildings. The vision for this district includes utilizing the packing houses for adaptive-reuse to preserve their historic integrity while providing opportunities for mixed-use and entertainment uses. The goal is to provide additional housing close to Old Town and the train station along with opportunities for businesses to locate in Downtown Upland without having to fit within the confines of Old Town parcel sizes. Parking structures would be provided to support the Metrolink Station and new development south of the train tracks. Outdoor plazas, park space, and streetscape enhancements would also embellish this area and create pedestrian connections with Old Town. Development in this district must be complementary to Old Town and would build upon the historic character that already exists in Downtown Upland.

- Residential Transit District lies south of the Pleasant View District and east of the Citrus Transportation District. This transit-oriented district would provide the majority of the multi-family housing in Downtown with convenient access to the Metrolink Station, Old Town and the Citrus Transportation District. New street connections and a pedestrian overcrossing over the train tracks would provide excellent access to Old Town, the transit station, and new businesses along A Street. Design guidelines and standards would ensure quality development of the multi-family homes with appropriate form and scale to protect the residential neighborhoods to the south.

- Olivedale District encompasses the southeast corner of the Plan Area, southeast of the Residential Transit District. This district is a lower-density multi-family residential neighborhood within Downtown Upland, with 12-20 dwelling units per acre. This district provides additional housing in Downtown and serves as a transition from the higher-density residential and mixed-uses in Downtown to the single-family residential neighborhoods to the south.

SPECIFIC PLAN BUILDOUT

The estimated Specific Plan buildout is provided in Table 2-1, *Estimated Specific Plan Buildout Range*. The estimated buildout numbers are based on the likelihood of new development that would occur within the Plan area over the next twenty years, to approximately 2030. The consultant team, in collaboration with City Staff, determined which parcels are likely to be developed or redeveloped in the Plan area and termed these sites “development opportunity sites.” The potential development opportunity sites are identified in Exhibit 2-4, *Development Opportunity Sites and Historic Properties*, and do not suggest a guarantee that these parcels would develop or redevelop. The anticipated changes in land use are based on the permitted uses in each district in which the opportunity sites exist.

There are a number of historic properties within the Plan area shown in Exhibit 2-4 that would be protected through Specific Plan policies. The historic properties that are also development opportunity sites would be subject to adaptive reuse standards and guidelines to allow for different uses, while preserving the historic structures. Adaptive reuse of historic properties would be limited to the land uses that are permitted in the specific district in which the properties are located.

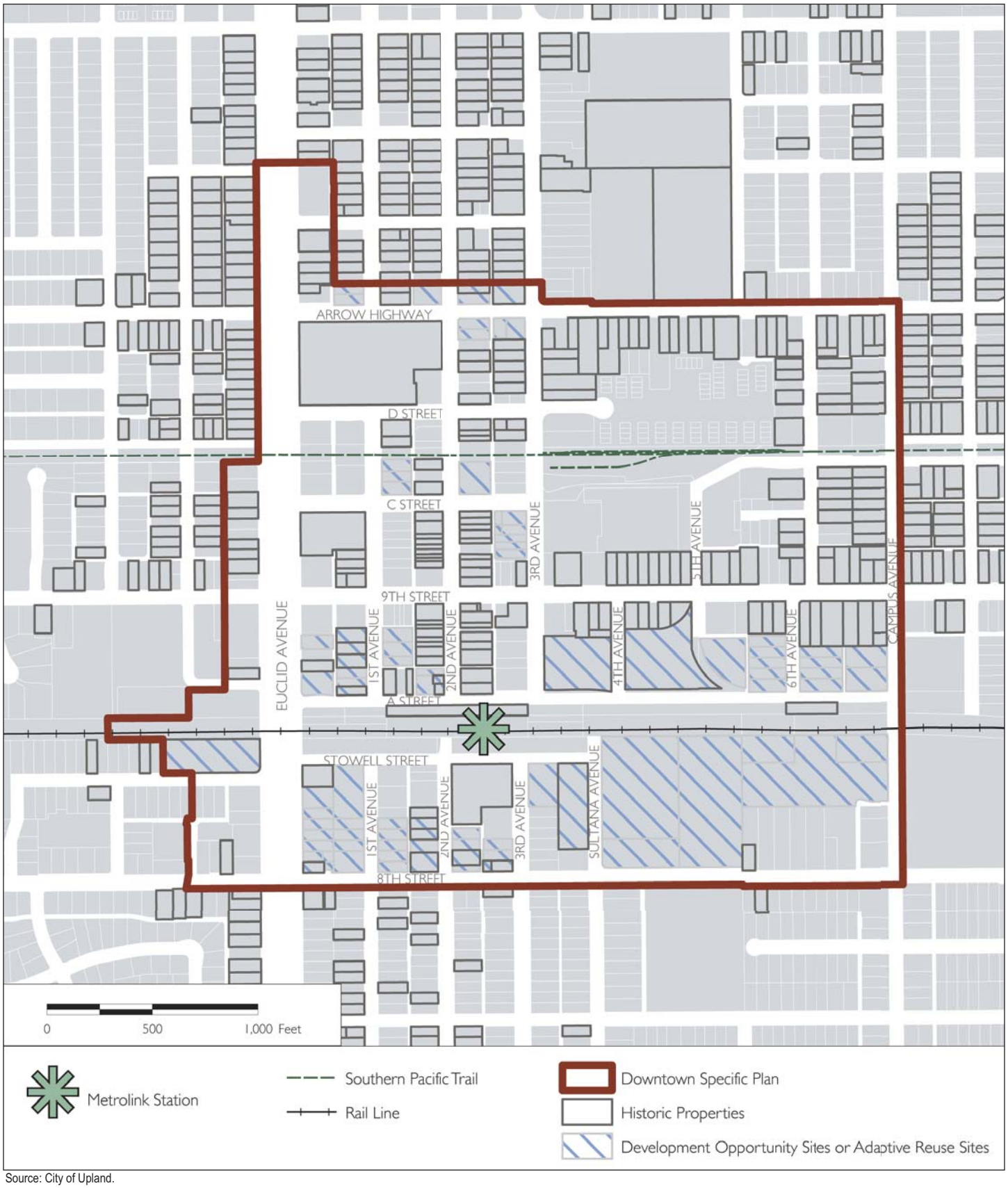
Table 2-1
Estimated Specific Plan Buildout Range

Land Uses	Existing (2009)	Specific Plan Buildout Range (2030)[1]	Difference Range
Commercial/Retail	348,433	468,433 - 518,433	120,000 - 170,000
Office	136,095	161,000 - 186,095	25,000 - 50,000
Commercial/Flex	0	25,000 - 50,000	25,000 - 50,000
Public/Institutional	79,176	63,255	-15,921
Industrial	518,057	46,762	-471,295
Single Family Residential	179 units	161 units	-18 units
Multi Family Residential	170 units	1,220 - 1,320 units	1,050 - 1,150 units
Off-Street Public Parking	1,012 spaces	1,492 spaces	480 spaces
Public Open Space	0	29,907	29,907

Note: In order to calculate Project buildout, it is assumed that 95 percent of vacant opportunity parcels will be developed and 75 percent of parcels with existing development will be redeveloped. It is also assumed that all opportunity sites will be developed to 80 percent development intensity since developers will not always build projects to maximum permitted density. For residential mixed-use development, it is also assumed that ground-floor commercial development will average 0.25 FAR due to the necessity to accommodate parking in the rear for the residential units.

2.5 PUBLIC ACTIONS AND APPROVAL REQUIRED

The City of Upland is the lead agency with approval authority for the proposed project. The City's project approvals include certification of the EIR for the proposed project, as well as adoption of the Specific Plan. In addition to the City, Federal, regional and State responsible agencies have discretionary authority over certain aspects of development projects. The EIR documentation is to be presented at a program-level and no specific development projects are being analyzed at this time.



Source: City of Upland.

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Development Opportunity Sites and Historic Properties

Exhibit 2-4

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** Historic Downtown Upland Specific Plan
2.	**Lead Agency Name and Address:** City of Upland 460 North Euclid Avenue Upland, California 91785-0460
3.	**Contact Person and Phone Number:** Ms. Sylvia Scharf, AICP, Planning Manager 909.931.4141
4.	**Project Location:** The proposed Historic Downtown Upland Specific Plan Project (project) encompasses approximately 210 acres generally bounded by Arrow Highway on the north, Campus Avenue on the east, 8th Street south and Euclid Avenue on the west in the City of Upland.
5.	**Project Sponsor's Name and Address:** City of Upland 460 North Euclid Avenue Upland, California 91785-0460
6.	**General Plan Designation:** Central Trading (CT); Office Only (CO); Single-Family Residential (4-6 dwelling units/acre); Multi-Family Residential (12-20 dwelling units/acre); Civic, Light Industrial (IL); and Transit Commercial (TC).
7.	**Zoning:** RS-7.5 (Residential, Single-Family 7,500 square foot lot area/dwelling); RM-2.0 (Multiple-Family Residential 2,000 square foot lot area/dwelling); ML (Light Industrial); MU (Mixed Use); RM 2.0(CO) (Multiple-Family Residential Condominium, 2,000 square foot lot area/dwelling); (CP)S (Commercial and Professional, Supplemental Use); CL (Limited Commercial); TC (Town Center); and Scenic Corridor Overlay.
8.	**Description of the Project:** (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary support or off-site features necessary for its implementation.) Refer to Section 2.3, *Project Characteristics*.
9.	**Surrounding Land Uses and Setting:** The Historic Downtown Upland Specific Plan Area is primarily surrounded by single-family residential uses.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).** To be determined as part of further review in the Program EIR.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated," as indicated by the checklist on the following pages.

✓	Aesthetics	✓	Land Use and Planning
	Agriculture Resources		Mineral Resources
✓	Air Quality	✓	Noise
	Biological Resources	✓	Population and Housing
✓	Cultural Resources	✓	Public Services
	Geology and Soils	✓	Recreation
✓	Hazards & Hazardous Materials	✓	Transportation/Traffic
✓	Hydrology & Water Quality	✓	Utilities & Service Systems
✓	Mandatory Findings of Significance		

3.3 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. _____

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 have been added. A NEGATIVE DECLARATION will be prepared. _____

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ✓

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. _____

Signature — Sylvia Scharf, AICP, Planning Manager
Printed Name

City of Upland
Agency

November 10, 2009
Date

3.4 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of Upland in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Potentially Significant Impact Unless Mitigated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
1. AESTHETICS. *Would the project:*				
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	✓			
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	✓			
2. AGRICULTURE RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓
3. AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:*				
a. Conflict with or obstruct implementation of the applicable air quality plan?	✓			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	✓			
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	✓			
d. Expose sensitive receptors to substantial pollutant concentrations?	✓			
e. Create objectionable odors affecting a substantial number of people?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. *Would the project:*				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
5. CULTURAL RESOURCES. *Would the project:*				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	✓			
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?			✓	
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	
d. Disturb any human remains, including those interred outside of formal cemeteries?			✓	
6. GEOLOGY AND SOILS. *Would the project:*				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			✓	
2) Strong seismic ground shaking?			✓	
3) Seismic-related ground failure, including liquefaction?			✓	
4) Landslides?			✓	
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			✓	
7. HAZARDS AND HAZARDOUS MATERIALS: *Would the project:*				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	✓			
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	✓			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			✓	
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓
8. HYDROLOGY AND WATER QUALITY. *Would the project:*				
a. Violate any water quality standards or waste discharge requirements?	✓			
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	✓			
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	✓			
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	✓			
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	✓			
f. Otherwise substantially degrade water quality?	✓			
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			✓	
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			✓	
j. Inundation by seiche, tsunami, or mudflow?				✓
9. LAND USE AND PLANNING. *Would the project:*				
a. Physically divide an established community?			✓	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	✓			
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
10. MINERAL RESOURCES. *Would the project:*				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			✓	
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			✓	
11. NOISE. *Would the project result in:*				
a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	✓			
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	✓			
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
12. POPULATION AND HOUSING. *Would the project:*				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	✓			
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			✓	
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
13. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?	✓			
2) Police protection?	✓			
3) Schools?	✓			
4) Parks?	✓			
5) Other public facilities?	✓			
14. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	✓			
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	✓			
15. TRANSPORTATION/TRAFFIC. *Would the project:*				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	✓			
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e. Result in inadequate emergency access?			✓	
f. Result in inadequate parking capacity?	✓			
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				✓
16. UTILITIES AND SERVICE SYSTEMS. *Would the project:*				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	✓			
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	✓			
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	✓			
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	✓			
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	✓			
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	✓			
g. Comply with federal, state, and local statutes and regulations related to solid waste?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
17. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✓			
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✓			
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✓			

4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study Checklist. Explanations are provided for each item.

4.1 AESTHETICS. *Would the proposal:*

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The project area is not within or a part of a designated scenic vista. The project area is currently urbanized with a mix of land uses. Development of the project could involve residential, commercial, office, public/institutional, industrial, and public open space uses at a greater intensity than currently exist. However, project implementation would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant in this regard.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less Than Significant Impact. According to the Upland General Plan, no officially designated State scenic routes or highways occur near the project area. Therefore, project implementation would not substantially damage scenic resources within a state scenic highway.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Potentially Significant Impact. The project area and its surroundings are urbanized and contain a mix of land uses with structures of various age and condition. The project would involve the development and redevelopment of new and existing uses with varying heights and massing, altering the existing visual character of the Downtown area. Additionally, the project area includes the Euclid Avenue corridor, from 8th Street to just north of Arrow Highway. Euclid Avenue serves as the primary western boundary to Downtown Upland and provides access from the south. Although not a state scenic highway, Euclid Avenue is identified as a local scenic corridor within the General Plan and is located within a Scenic Corridor Zone – Overlay (SC). The project proposes to preserve and enhance Euclid Avenue and to improve the connection between the Euclid District and Downtown Upland. Further analysis is required to assess the project's potential impacts on the visual character and quality of the area.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Potentially Significant Impact. The project area and its surroundings are currently urbanized and contain various forms of on- and off-site lighting. As part of the proposed project, lighting would be included for activity areas involving nighttime uses, parking, security lighting around structures and interiors of buildings. Project implementation would result in the development of the area with new uses at a greater intensity than currently exists. The introduction of new sources of light and glare would potentially

affect views in the area. Additional analysis is required to assess potential impacts related to light and glare.

4.2 AGRICULTURE RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. The project area is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. Thus, project implementation would not result in the conversion of farmland to non-agricultural uses.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. Implementation of the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The project area is currently zoned for commercial, office, industrial, public and residential uses. Although the project would involve rezoning the project area to Specific Plan (SP), it would not involve rezoning from an agricultural use.

c) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

No Impact. The proposed project does not involve changes in the existing environment that could result in conversion of Farmland to non-agricultural uses. The project area is urbanized and there are no farmland uses currently occurring within the area.

4.3 AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:*

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Potentially Significant Impact. The project area is located within the South Coast Air Basin (SCAB), which is regulated by the South Coast Air Quality Management District (SCAQMD). The U.S. EPA has classified the SCAB as a non-attainment area for Federal and State air quality standards. Further review is necessary to confirm the project's status in terms of compliance and/or conflict with current SCAQMD guidelines.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Potentially Significant Impact. Construction of the proposed project would result in pollutant emissions from three different sources, including: (1) short-term construction emissions, (2) long-term mobile emissions from trucks and vehicles traveling to and from

the area once the project is operational, and (3) long-term stationary emissions from power and gas consumption and machinery and equipment on-site.

The greatest potential for air quality impacts from the project would be attributed to mobile emissions. The project's potential air quality impacts on a local and regional level requires an evaluation pursuant to the SCAQMD and California Air Resources Board (CARB) requirements and methodology. Additional analysis is necessary to quantify potential project-related air quality impacts (both short-term and long-term) and identify appropriate mitigation that would be effective in reducing pollutant emissions.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Potentially Significant Impact. Refer to Responses 4.3(a) and 4.3(b).

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Potentially Significant Impact. Sensitive populations (i.e., children, senior citizens and acutely or chronically ill people) are more susceptible to the effects of air pollution than are the general population. Land uses considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. Sensitive receptors in proximity to the project area include existing residences, schools, and a senior center. Construction and operation of the project would increase vehicle trips on area roadways and result in associated air pollutants. Grading and excavation operations may also have air quality impacts in the absence of mitigation.

The proposed project has the potential to generate direct and indirect greenhouse gas emissions. Sources of greenhouse gases generated by the project include construction activities, traffic generation, energy consumption, and water usage. These impacts require additional analysis to assess their level of significance.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. Construction activity associated with the project may generate detectable odors from heavy-duty equipment exhaust. However, this impact would be short-term in nature and cease upon project completion. Proposed land uses are not anticipated to create objectionable odors affecting a substantial number of people. Impacts are considered less than significant.

4.4 BIOLOGICAL RESOURCES. *Would the project:*

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

No Impact. The project area is predominately urbanized and built-out. The project proposes development and redevelopment of vacant and underutilized sites, adaptive

reuse of existing structures, and the creation of open space uses within Downtown Upland. No special status plant or animals species exist in the local vicinity due to the level of past disturbance and non-native plant species in the area.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

No Impact. As previously stated, the project area is predominately urbanized and surrounded with similar urban development. No riparian habitat or natural communities exist within the project area.

c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, costal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. No federally protected wetlands occur within the project area. Therefore, implementation of the proposed project would not result in any impacts in this regard.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

No Impact. No wildlife corridors or native wildlife nurseries exist in the project area. Therefore, implementation of the proposed project would not result in any impacts in this regard.

e) *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.*

No Impact. The project area is urbanized and contains non-native vegetation. Implementation of the proposed project would not conflict with any local policies or ordinances that protect biological resources.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. The project area does not have an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other habitat conservation plan. Therefore, the project would not result in impacts in this regard.

4.5 CULTURAL RESOURCES. *Would the project:*

a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

Potentially Significant Impact. The project proposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. Historic resources/structures have been identified within the project area. It is anticipated that potential development of vacant

and underutilized sites would occur adjacent to or in proximity of historic or potentially historic properties. Further, adaptive reuse of historic properties is proposed. Additional analysis will be required to determine the potential for impacts to historic and potentially historic resources within the project area.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

Less Than Significant Impact. The project area is predominately urbanized with land area having been previously disturbed. No archaeological resources are known to occur within the area and the likelihood of archaeological resources existing on-site is minimized by the land area having been previously disturbed. Should evidence of archaeological resources occur during grading and construction, operations would be required to cease and a qualified archaeologist would be contacted to determine the appropriate course of action.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact. The project area is predominately urbanized. No paleontological resources are known to occur within the area and the likelihood of paleontological resources existing on-site is minimized by the land area having been previously disturbed. Should evidence of paleontological resources occur during grading and construction, operations would be required to cease and a qualified archaeologist would be contacted to determine the appropriate course of action.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. The project area is predominately urbanized with land area having been previously disturbed. No known human remains exist on-site, and due to the level of past disturbance, it is not anticipated that human remains exist within the project area. In the event human remains are encountered during earth removal or disturbance activities, all activities would cease immediately and a qualified archaeologist and Native American monitor would be immediately contacted. The Coroner would be contacted pursuant to Sections 5097.98 and 5097.99 of the Public Resources Code relative to Native American remains. Should the Coroner determine the human remains to be Native American, the Native American Heritage Commission would be contacted pursuant to Public Resources Code Section 5097.98. A less than significant impact would occur in this regard.

4.6 GEOLOGY AND SOILS. *Would the project:*

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. According to the Upland General Plan, there are three faults located within or in close proximity to the City: Cucamonga-Sierra Madre Fault, Red Hill Fault, and San Jose Fault. The Cucamonga-Sierra Madre Fault has been identified as within an Alquist-Priolo Earthquake Fault Zone. The Cucamonga-Sierra Madre Fault is located along the southern margin of the eastern San Gabriel Mountains, north of the City. The project area is not located within, or immediately adjacent to this Alquist-Priolo Earthquake Fault Zone. Therefore, rupture of a known earthquake fault would not occur within the project area. Adherence to standard engineering practices and design criteria relative to seismic and geologic hazards in accordance with the *Uniform Building Code* (UBC) and the City of Upland building code and engineering requirements, would reduce impacts to a less than significant level.

2) Strong seismic ground shaking?

Less Than Significant Impact. The City of Upland is located in an area that could experience intense seismic ground shaking due to its proximity to local and regional faults. The intensity of ground shaking would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project area. According to the Upland General Plan, the City is located within the Chino Basin, an area underlain, for the most part, by thick alluvium. Generally speaking, alluvium has a tendency to amplify ground motion. It is anticipated that the project area would experience ground shaking from earthquakes generated along active faults located within the area. Adherence to standard engineering practices and design criteria relative to seismic and geologic hazards in accordance with the UBC, and the City of Upland building code and engineering requirements, would reduce impacts to a less than significant level.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The Seismic Hazards Zone Map, Ontario Quadrangle (November 17, 2000) includes the City of Upland. However, it is noted that the area has not been evaluated for liquefaction potential. According to the Upland General Plan, the City's soil conditions may have a propensity for liquefaction. Site-specific development projects within the proposed project area would be required to prepare soil investigations to identify the requisite measures to minimize the potential for damage. With adherence to standard engineering practices, design criteria relative to seismic and geologic hazards in accordance with the UBC, and the City of Upland building code and engineering requirements, impacts would be reduced to a less than significant level.

4) Landslides?

Less Than Significant Impact. The project area is located in an existing urban area. The project area is flat and surrounding properties are flat, with no unusual geographic features, and therefore, does not have the potential to slide, or experience sliding from adjacent areas. Project implementation would not expose people or structures to landslides, therefore a less than impact would occur in this regard.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact. The project area is primarily developed and project implementation would not significantly alter the impermeable surface area of the area.

Project construction would produce loose soils, which would be subject to erosion if the surface areas were to be disturbed or vegetation were to be removed. Grading and trenching for construction may expose soils to short-term wind and water erosion. The project would be required to comply with all requirements set forth in the National Pollutant Discharge Elimination System permit, for construction activities, reducing potential impacts to less than significant levels.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact. Refer to responses 4.6 (a)(3) and (4). According to the Upland General Plan, the City has experienced historic, regional land subsidence due to removal of groundwater. However, in the early 1970s the County of San Bernardino instituted a program to recharge groundwater, alleviating issues related to subsidence. Thus, impacts are considered less than significant in this regard.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Less Than Significant Impact. Expansive soils are typically those of high clay content that swell and shrink during wet and dry climatic events, respectively. According to the Upland General Plan, the City is underlain by thick alluvium. Alluvium is characterized by water laid soil deposits, such as silt, clay, or sand. The project area is primarily developed. Soils do not represent a constraint to development, as indicated by existing development within the project and surrounding area. Development and improvements in the project area would be subject to applicable building codes, reducing impacts to a less than significant level.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

Less Than Significant Impact. The proposed project would include improvements and/or modifications to on-site sewer systems, as necessary. It would not be necessary to install septic tanks or other alternative types of wastewater disposal systems. Less than significant impacts are anticipated in this regard.

4.7 HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. The proposed project would not create a significant hazard to the public or the environment from the routine transport, use, or disposal of hazardous materials. Small amounts of hazardous materials may be found in solvents and chemicals used for cleaning, building maintenance, and landscaping. The materials would be similar to those found in common household products, such as cleaning products or pesticides. Hazardous materials used in construction and operation of the proposed project would be subject to City, State and Federal regulations, reducing impacts to a less than significant level.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Potentially Significant Impact. The proposed uses in the project area are not anticipated to result in the creation of health hazards following compliance with health and safety regulations. The proposed uses would not use, generate, or dispose of hazardous materials in large quantities. As stated, hazardous materials used in construction and operation of the proposed project would be subject to City, State and Federal regulations. However, due to the age of structures located within the area, the potential exists for hazardous materials, including the presence of asbestos and lead-based paint within the existing buildings. Further analysis is required in the EIR.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact. Schools are located within the project and surrounding area. However, hazardous emissions or the handling of hazardous materials, substances and waste are not anticipated to be part of the proposed project, therefore impacts would be less than significant in this regard.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Potentially Significant Impact. Commercial and industrial uses are currently located within the project area. Further analysis in the EIR will be required to determine if any properties within the project area or project vicinity are included on a list of hazardous materials sites and to determine the presence and extent of any potential environmental conditions.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

Less Than Significant Impact. The LA/Ontario International Airport is located approximately three miles southeast of the project area within the City of Ontario. According to the Airport Master Plan for the LA/Ontario International Airport, the project area is not located within the airport influence area. Cable Airport is a privately owned public use airport located within two miles of the project area's westernmost boundary. The project area is not located within the airport's planning area boundaries. As stated, the project area is currently urbanized with residential and non-residential uses. The project proposes development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures with uses similar to those that already exist within the area. Project implementation would not result in a safety hazard for people residing or working in the area.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project are?*

Less Than Significant Impact. Refer to Response 4.7(e).

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. Roadways within and around the project area may be subject to temporary closures during construction within the project area. However, construction activities, which may result in temporary road closures, would not significantly impair implementation of, or physically interfere with an emergency response plan or emergency evacuation plan, as additional roadways would be available for emergency response and evacuation. Additionally, any street closures proposed by the project would be reviewed by the Upland Fire Department, and would be subject to all emergency access standards and requirements, further reducing impacts to a less than significant level.

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

No Impact. The project area and surrounding areas are urbanized. The project area is not located with a potential wildland fire area as identified by the Upland General Plan. Future development as a result of project implementation would introduce additional ornamental landscaping, which is not anticipated to create hazardous fire conditions. No impacts would occur in this regard.

4.8 HYDROLOGY AND WATER QUALITY. *Would the Project:*

a) *Violate any water quality standards or waste discharge requirements?*

Potentially Significant Impact. The project proposes development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures, resulting in an incremental increase in the amount of impervious surface in the project area. Increased runoff has the potential to increase the pollutant load off-site and negatively impact storm water quality. Further analysis will be required to determine the potential impact on water quality.

b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Potentially Significant Impact. The project and surrounding area are currently developed with a variety of uses. However, the project proposes development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures, which may result in an incremental increase in the amount of impervious surface in the project area. The increase in impervious surface area could interfere with groundwater recharge. A portion of the City's water supply comes from groundwater. Project implementation would involve development of uses at a greater intensity than currently exists, resulting in increased demand for water. Further analysis would be required. Refer to Response 4.16(b) for additional discussion of water resources.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Potentially Significant Impact. As previously stated, the project area is currently urbanized and adjacent areas are predominately built-out. However, the project proposes development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures, resulting in an incremental increase in the amount of impervious surface in the project area. Further analysis of the project's potential to alter drainage within the area is required.

d) *Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

Potentially Significant Impact. Refer to Response 4.8(c).

e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Potentially Significant Impact. Refer to Responses 4.8(a) and 4.8(c).

f) *Otherwise substantially degrade water quality?*

Potentially Significant Impact. Refer to response 4.8 (a).

g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

Less Than Significant Impact. According to the Flood Insurance Rate Map (FIRM), published by the Federal Emergency Management Agency (FEMA), the project area is located in Zone X, which is defined by FEMA as an area outside the 0.2 percent annual chance of floodplain. Further, the City's General Plan indicates that the City has adequate flood control facilities and that new development would be required to control on-site runoff in accordance with the City's Grading Ordinance.[1] Impacts are considered less than significant in this regard.

h) *Place within a 100-year flow hazard area structures which would impede or redirect flood flows.*

Less Than Significant Impact. Refer to Response 4.8(g).

[1] City of Upland General Plan, Seismic Safety Element, page 8.16.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

Less Than Significant Impact. Refer to Response 4.8(g). The San Antonio Dam is located north of the City of Upland. It is an earth/rock fill dam operated by the Los Angeles District-Corps of Engineers. The dam is normally empty except during or immediately following periods of significant runoff. According to the San Bernardino County Operational Area Multi-Jurisdictional Hazard Mitigation Plan, inundation of the City of Upland due to dam failure is considered unlikely. Impacts would be less than significant in this regard.

j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. No significant water features are located within the project area. Therefore, no impacts are anticipated in this regard.

4.9 LAND USE AND PLANNING. *Would the project:*

a) *Physically divide an established community?*

Less Than Significant Impact. The project area contains a mix of commercial, office, public/institutional, industrial, and residential uses. Implementation of the project would involve development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures with commercial/retail, office, commercial/flex, residential and open space uses at a greater intensity than currently exists. The proposed project would not physically divide an established community, as the project proposes to maintain the overall character of the Downtown and large scale changes in existing uses would not occur. Additionally, the project proposes improved connections and open space to encourage integration of uses within the Downtown and the surrounding area. Impacts would be less than significant.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Potentially Significant Impact. The project area is currently designated Central Trading (CT), Office Only (CO), Single-Family Residential (4-6 dwelling units/acre), Multi-Family Residential (12-20 dwelling units/acre), Civic, Light Industrial (IL), and Transit Commercial (TC). Adoption of the Historic Downtown Upland Specific Plan would change the existing land use designations to Historic Downtown Upland Specific Plan (SP). The project area is currently zoned RS-7.5 (Residential, Single-Family 7,500 square foot lot area/dwelling), RM-2.0 (Multiple-Family Residential 2,000 square foot lot area/dwelling), ML (Light Industrial), MU (Mixed Use), RM 2.0(CO) (Multiple-Family Residential Condominium, 2,000 square foot lot area/dwelling), (CP)S (Commercial and Professional, Supplemental Use), CL (Limited Commercial), TC (Town Center) to Historic Downtown Upland Specific Plan (SP). The project would involve a zone change to accommodate mixed-uses, as well as higher density residential uses within the project area. Additionally, the lands located within 250 feet of the center line of Euclid Avenue within the project area are located within the Scenic Corridor Overlay. Further, a large portion of the project area is located within the merged redevelopment project area.

Implementation of the project would involve development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures with commercial/retail, office, commercial/flex, residential and open space uses at a greater intensity than currently exists. Further analysis regarding the project's consistency with the applicable goals, policies, and development standards would be required.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No Impact. As stated in Response 4.4(f), the project does not conflict with habitat conservation plans or natural community conservation plans.

4.10 MINERAL RESOURCES. *Would the project:*

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

Less Than Significant Impact. According to the Upland General Plan, the majority of the City, including the project area, is located within Mineral Resource Zone 2 (MRZ-2). MRZ-2 is identified as areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. The Sector Map within the Upland General Plan provides more detailed information regarding mineral resources holdings and deposits within each Mineral Resource Zone. The project area is not located within an identified sector for mineral resources holdings and deposits. Further, the project area is not in an area designated by the City for consideration of mineral extraction in the future. Implementation of the proposed project would not involve the loss of available known mineral resources.

b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

Less Than Significant Impact. Refer to Response 4.10(a). According to the Upland General Plan, the project area is not located within a locally-important mineral resource recovery site.

4.11 NOISE. *Would the project result in:*

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Potentially Significant Impact. Project construction and operation would result in both short-term and long-term noise impacts. Short-term impacts would occur during demolition, grading, and construction. Long-term noise impacts would be associated with increased vehicular traffic to and from the project area, outdoor activities, deliveries, and stationary mechanical equipment on-site. Both short- and long-term noise impacts require further evaluation in the EIR.

b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Potentially Significant Impact. The project may include extensive clearing and grading to prepare the project area for development. Further review in the EIR is required to determine the significance of the impacts.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact. Refer to Response 4.11(a).

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing with out the project?*

Potentially Significant Impact. Refer to Response 4.11(a).

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant Impact. LA/Ontario International Airport is located approximately three miles southeast of the project area within the City of Ontario. According to the Airport Master Plan for the LA/Ontario International Airport, the project area is not located within the airport influence area. Further, the project area is not located within a noise contour area directly affected by operations at the airport. Cable Airport is a privately owned public use airport located within two miles of the project area's westernmost boundary. The project area is not located within the airport's planning area boundaries or within a noise contour area directly affected by operations at the airport. A less than significant impact would occur in this regard.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant Impact. Refer to Response 4.11(e).

4.12 POPULATION AND HOUSING. *Would the project:*

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Potentially Significant Impact. The project proposes the development of residential and employment generating uses in addition to existing uses within the area. Further analysis will be required to determine the growth inducing potential of the project.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

Less Than Significant Impact. Project implementation would involve new development on currently developed sites, potentially resulting in the removal of existing residential

uses. Buildout of the Specific Plan would involve an overall decrease of 18 single-family residential units and an increase of up to 850 multi-family residential units. Although some existing residential units may be removed, the number of units is relatively minor in comparison to the number of units that would be developed. Additionally, it is anticipated that residential properties would be acquired as they become vacant and available for purchase, and therefore would not involve displacement of people. Impacts would be less than significant in this regard.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. Refer to Response 4.12(b).

4.13 PUBLIC SERVICES.

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

1) Fire protection?

Potentially Significant Impact. The Upland Fire Department provides fire protection services to the project area. Due to the location and nature of the project, fire protection needs may be affected. Additional analysis and consultation with the Fire Department will be required.

2) Police protection?

Potentially Significant Impact. The Upland Police Department provides police protection for the area. Due to the location and nature of the project, police protection needs may be affected. Additional analysis and consultation with the Police Department will be required.

3) Schools?

Potentially Significant Impact. Proposed development of residential uses could result in increased student populations to the area. Additional analysis and consultation with the affected school district is required.

4) Parks?

Potentially Significant Impact. Proposed development of residential uses would result in an increased demand on park and recreation facilities within the City. Additionally, project implementation would result in a population increase potentially requiring additional park acreage. Further analysis regarding park facility impacts is required.

5) Other public facilities?

Potentially Significant Impact. The increased public facilities and landscaping associated with the project may result in greater maintenance requirements. Further review will be required to assess possible impacts to other public facilities.

4.14 RECREATION.

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Potentially Significant Impact. Refer to Response 4.13(a)(4).

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Potentially Significant Impact. Refer to Response 4.13(a)(4).

4.15 TRANSPORTATION/TRAFFIC. *Would the project:*

a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*

Potentially Significant Impact. Implementation of the proposed project would increase vehicular movement in the project vicinity. The proposed increase of commercial, office, and residential uses to the area would result in increased traffic volumes to existing roadways. Further analysis to assess the impact on traffic and circulation in the area will be required.

b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

Potentially Significant Impact. Refer to Response 4.15(a).

c) *Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No Impact. Due to the nature and scope of the proposed land uses, project implementation would not affect air traffic patterns and would not result in safety risks. No impact would occur in this regard.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. The project proposes development and redevelopment of vacant and underutilized sites and adaptive reuse of existing structures with uses similar to those that already exist within the area. Hazards resulting from incompatible uses would not occur. The project would not involve alteration of the overall street

network. However, some roadway improvements are being considered including extension of an existing roadway and new north/south streets within the Residential Transit District and widening of A Street to allow for angled parking on the north side of the street. A pedestrian crossing over the Metrolink tracks is also being considered. Potential improvements would improve circulation and safety within the project area and would not increase hazards within the area. Impacts would be less than significant in this regard.

e) *Result in inadequate emergency access?*

Less Than Significant Impact. Refer to Response 4.7(g).

f) *Result in inadequate parking capacity?*

Potentially Significant Impact. The project proposes off-street public parking to serve existing and proposed uses within the area. Further analysis to assess the adequacy of parking will be required.

g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

No Impact. No conflicts with adopted policies supporting alternative transportation are anticipated to occur. The project proposes to enhance connectivity within the Downtown and to the surrounding area. Proposed uses would encourage and support alternative modes of transportation.

4.16 UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Potentially Significant Impact. The Inland Empire Utilities Agency (IEUA) provides regional sanitary sewer services to the City, including the project area. The City owns and operates local wastewater collection systems that deliver wastewater flows into regional trunk sewer lines owned by IEUA. Implementation of the project would involve development of residential and non-residential uses above existing conditions. Further analysis will be required to determine the impacts associated with the available capacity of the wastewater treatment facility.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Potentially Significant Impact. The City of Upland receives its water from three sources: wells, surface water, and imported water. Well water is pumped from seven City wells, seven San Antonio/West End Water Company wells, and three West End Water Company wells. Surface water comes from the City's San Antonio Canyon Water Treatment Plant. Imported water is purchased from the Metropolitan Water District and is treated at the Water Facilities Authority – Agua de Lejos Water Treatment Plant. As stated, the IEUA provides regional sanitary sewer services to the City. Implementation of the project would involve development at an increased intensity than currently exists.

Further analysis is required to determine the impacts associated with the available capacity of water and wastewater treatment facilities.

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Potentially Significant Impact. Refer to Response 4.8(a).

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Potentially Significant Impact. Refer to Response 4.16(b).

e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Potentially Significant Impact. Refer to Response 4.16(b).

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Potentially Significant Impact. The proposed project would generate increased amounts of solid waste, beyond existing conditions. The City's waste disposal needs are served through Burrtec Waste Industries, Inc. The project's effect upon the landfill capacity will require further evaluation.

g) *Comply with federal, state and local statutes and regulations related to solid waste?*

Potentially Significant Impact. Refer to Response 4.16(f). The project must comply with adopted programs and regulations pertaining to solid waste. Further evaluation will be required.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE.

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Potentially Significant Impact. The project area is predominately urbanized and built-out. The project proposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. Implementation of the proposed project would not result in impacts to biological resources; refer to responses 4.4(a) through (f). Further analysis of potential project impacts on historical resources is required. Refer to response 4.5(a) under Cultural Resources.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Potentially Significant Impact. A review of cumulative impacts for each issue area that has been identified as potentially significant will be required pursuant to Section 15130 of CEQA.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Potentially Significant Impact. The proposed project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Further review and analysis is required.

APPENDIX B
NOP Comments

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

Notice of Preparation

November 16, 2009

RECEIVED

NOV 23 2009

COMMUNITY DEVELOPMENT

To: Reviewing Agencies

Re: Historic Downtown Upland Specific Plan
SCH# 2009111055

Attached for your review and comment is the Notice of Preparation (NOP) for the Historic Downtown Upland Specific Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Sylvia A. Scharf
City of Upland
460 North Euclid Avenue
Upland, CA 91786

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Acting Director

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH#	2009111055
Project Title	Historic Downtown Upland Specific Plan
Lead Agency	Upland, City of

Type	**NOP** Notice of Preparation
Description	The Specific Plan provides permitted uses, development standards, and design guidelines to guide development within nine districts to achieve the overall vision for the Specific Plan area. The Specific Plan proposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. The Specific Plan would allow for commercial/retail, office, commercial/flex, public/institutional, industrial and public open space, and residential uses.

Lead Agency Contact

Name	Sylvia A. Scharf		
Agency	City of Upland		
Phone	909 931-4130	*Fax*	
email			
Address	460 North Euclid Avenue		
City	Upland	*State* CA	*Zip* 91786

Project Location

County	San Bernardino				
City	Upland				
Region					
Cross Streets	Arrow Highway, 8th Street, Campus Avenue and Euclid Avenue				
Lat / Long	34° 5' 47.5" N / 117° 38' 47.5" W				
Parcel No.					
Township	1S	*Range* 7W	*Section* 8	*Base*	SBB&M

Proximity to:

Highways	I-10
Airports	Yes
Railways	Yes
Waterways	No
Schools	Yes
Land Use	Various/CT, CO, SFR, MFR, Civic, IL, TC/RS-7.5, RM-2.0, ML, MU, RM 2.0 (CO), (CP)S, CL, TC and Scenic Corridor Overlay

Project Issues	Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 6; Native American Heritage Commission; CA Department of Public Health; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 8; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

Date Received	11/16/2009	*Start of Review*	11/16/2009	*End of Review*	12/15/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOT: Distribution List

County: San Bernardino

SCH# 2009111055

Resources Agency

- [ ] Resources Agency
  Nadell Gayou
- [ ] Dept. of Boating & Waterways
  Mike Sotelo
- [ ] California Coastal Commission
  Elizabeth A. Fuchs
- [ ] Colorado River Board
  Gerald R. Zimmerman
- [ ] Dept. of Conservation
  Rebecca Salazar
- [ ] California Energy Commission
  Eric Knight
- [ ] Cal Fire
  Allen Robertson
- [ ] Office of Historic Preservation
  Wayne Donaldson
- [ ] Dept of Parks & Recreation
  Environmental Stewardship Section
- [ ] Central Valley Flood Protection Board
  James Herota
- [ ] S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- [ ] Dept. of Water Resources
  Resources Agency
  Nadell Gayou
- [ ] _____
  Conservancy

Fish and Game

- [ ] Depart. of Fish & Game
  Scott Flint
  Environmental Services Division
- [ ] Fish & Game Region 1
  Donald Koch
- [ ] Fish & Game Region 1E
  Laurie Harnsberger
- [ ] Fish & Game Region 2
  Jeff Drongesen
- [ ] Fish & Game Region 3
  Robert Floerke
- [ ] Fish & Game Region 4
  Julie Vance
- [ ] Fish & Game Region 5
  Don Chadwick
  Habitat Conservation Program
- [ ] Fish & Game Region 6
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] Fish & Game Region 6 I/M
  Brad Henderson
  Inyo/Mono, Habitat Conservation Program
- [ ] Dept. of Fish & Game M
  George Isaac
  Marine Region

Other Departments

- [ ] Food & Agriculture
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] Depart. of General Services
  Public School Construction
- [ ] Dept. of General Services
  Anna Garbeff
  Environmental Services Section
- [ ] Dept. of Public Health
  Bridgette Binning
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] Delta Protection Commission
  Linda Flack
- [ ] Office of Emergency Services
  Dennis Castrillo
- [ ] Governor's Office of Planning & Research
  State Clearinghouse
- [ ] Native American Heritage Comm.
  Debbie Treadway
- [ ] Public Utilities Commission
  Leo Wong
- [ ] Santa Monica Bay Restoration
  Guangyu Wang
- [ ] State Lands Commission
  Marina Brand
- [ ] Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Business, Trans & Housing

- [ ] Caltrans - Division of Aeronautics
  Sandy Hesnard
- [ ] Caltrans - Planning
  Terri Pencovic
- [ ] California Highway Patrol
  Scott Loetscher
  Office of Special Projects
- [ ] Housing & Community Development
  CEQA Coordinator
  Housing Policy Division

Dept. of Transportation

- [ ] Caltrans, District 1
  Rex Jackman
- [ ] Caltrans, District 2
  Marcelino Gonzalez
- [ ] Caltrans, District 3
  Bruce de Terra
- [ ] Caltrans, District 4
  Lisa Carboni
- [ ] Caltrans, District 5
  David Murray
- [ ] Caltrans, District 6
  Michael Navarro
- [ ] Caltrans, District 7
  Elmer Alvarez
- [ ] Caltrans, District 8
  Dan Kopulsky
- [ ] Caltrans, District 9
  Gayle Rosander
- [ ] Caltrans, District 10
  Tom Dumas
- [ ] Caltrans, District 11
  Jacob Armstrong
- [ ] Caltrans, District 12
  Chris Herre

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
- [ ] Transportation Projects
  Douglas Ito
- [ ] Industrial Projects
  Mike Tollstrup

- [ ] California Integrated Waste Management Board
  Sue O'Leary
- [ ] State Water Resources Control Board
  Regional Programs Unit
  Division of Financial Assistance
- [ ] State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] State Water Resouces Control Board
  Steven Herrera
  Division of Water Rights
- [ ] Dept. of Toxic Substances Control
  CEQA Tracking Center
- [ ] Department of Pesticide Regulation
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- [ ] RWQCB 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] RWQCB 3
  Central Coast Region (3)
- [ ] RWQCB 4
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] RWQCB 5S
  Central Valley Region (5)
  - [ ] RWQCB 5F
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] RWQCB 5R
    Central Valley Region (5)
    Redding Branch Office
- [ ] RWQCB 6
  Lahontan Region (6)
  - [ ] RWQCB 6V
    Lahontan Region (6)
    Victorville Branch Office
- [ ] RWQCB 7
  Colorado River Basin Region (7)
- [ ] RWQCB 8
  Santa Ana Region (8)
- [ ] RWQCB 9
  San Diego Region (9)

- [ ] Other _____

Last Updated on 10/21/2009

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO

SOLID WASTE MANAGEMENT DIVISION
222 West Hospitality Lane, Second Floor • San Bernardino, CA 92415-0017 • (909) 386-8701
Administration/Engineering Fax (909) 386-8900

GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.
Director of Public Works

PETER H. WULFMAN
Solid Waste Division Manager

November 18, 2009

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NOV 23 2009

COMMUNITY DEVELOPMENT

Ms. Sylvia Scharf, AICP, Planning Manager
Community Development Department
City of Upland
460 North Euclid Avenue
Upland, CA 91785

RE: NOTICE OF PREPARATION OFA DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN PROJECT

Dear Ms. Scharf:

Thank you for the opportunity to comment on the above-referenced project.

The County of San Bernardino Solid Waste Management Division is responsible for the management and oversight of all County landfill and waste transfer operations. As such, we would request that the following issues be addressed in the Environmental Impact Report:

- The creation of a new waste stream with this development and its impact on existing landfill capacity and traffic (information provided should include waste generation pre and post construction, estimated tonnage, existing approved tonnage at receiving landfill(s), potential increase in traffic at the development site [creation of new streets], traffic to the landfill itself, etc.);
- Requirements for handling recycling, construction and demolition debris (information should include existing recycling programs);
- Whether any hazardous waste will be generated, and, if so, types and quantities, including proposed disposal method(s) (information should address pre and post construction; i.e., will any hazardous materials be used during demolition and/or construction and the types/quantities of hazardous waste expected after project completion);
- Availability of commercial waste haulers and expected increases in traffic due to expanded hauler routes to serve the proposed development.

Should you have any questions or comments, please feel free to contact Mary Patterson, Solid Waste Programs Administrator, by phone at (909) 382-3237; by facsimile at (909) 386-8964, by mail to the address listed above, or by e-mail to mpatterson@swm.sbcounty.gov.

Sincerely,

Nancy Sansonetti, AICP, Principal Planner/Chief
Planning & Permitting Section

Board of Supervisors

BRAD MITZELFELT ..... First District
PAUL BIANE ..... Second District
NEIL DERRY ..... Third District
GARY OVITT ..... Fourth District
JOSIE GONZALES ..... Fifth District

Cucamonga Valley Water District
Service You Can Depend On

Robert A. DeLoach
General Manager
Chief Executive Officer

10440 Ashford Street • Rancho Cucamonga, CA 91729-0638
P.O. BOX 638 • (909) 987-2591 • Fax (909) 476-8032

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DEC 14 2009
COMMUNITY DEVELOPMENT

December 7, 2009

Ms. Sylvia Scharf
Community Development Department
City of Upland
460 North Euclid Avenue
Upland, CA 91785

Re: Notice of Preparation of a Draft Environmental Impact Report for the Historic Downtown Upland Specific Plan Project

Dear Ms. Scharf:

The Cucamonga Valley Water District has reviewed the above referenced project and have no comments or concerns. Please note that the Cucamonga Valley Water District does not own or operate any facilities within the proposed construction area. For any future projects please refer to the enclosed District boundary map.

If you have any questions concerning this matter, please contact me at (909-987-2591).

Sincerely,

CUCAMONGA VALLEY WATER DISTRICT

Ted Munson

Ted Munson
Engineering Technician II

Enclosure

James V. Curatalo, Jr. President
Randall James Reed Vice President
Kathy Tiegs Director
Ron Sakala Director
Floyd E. Clark, Sr. Director

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maziar Movassaghi, Acting Director
5796 Corporate Avenue
Cypress, California 90630

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COMMUNITY DEVE

Arnold Schwarzenegger
Governor

December 7, 2009

Ms. Sylvia A. Scharf
AICP, Planning Manager
Community Development Department
City of Upland
460 North Euclid Avenue
Upland, California 91785
sscharf@ci.upland.ca.us

NOTICE OF PREPARATION FOR A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN PROJECT (SCH# 2009111055), CITY OF UPLAND, SANBERNARDINO COUNTY

Dear Ms. Sylvia:

The Department of Toxic Substances Control (DTSC) has received your submitted Initial Study and Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the above-mentioned Project. The following project description is stated in your document: "The Historic Downtown Upland Specific Plan (Specific Plan) provides permitted uses, development standards, and design guidelines to guide development within nine districts to achieve the overall vision for the Specific Plan area. The Specific Plan purposes development and redevelopment of vacant and underutilized sites, adaptive reuse of existing structures, and the creation of open space uses within Downtown Upland. The proposed Plan area is located within the City of Upland, San Bernardino County, California. It consists of 210 acres and is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east, and Euclid Avenue to the west. The existing land uses within the Plan Area include commercial, office and professional, special/institutional, multi-family housing, single-family housing and industrial. There are also large vacant or underutilized parcels and surface parking lots within the Plan area. " DTSC has the following comments:

1) The EIR should identify the current or historic uses in the project area that may have resulted in a release of hazardous wastes/substances, and any known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the pertinent regulatory agencies:

4) Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports by these agencies should be included in the EIR.

5) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

6) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

7) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

9) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented.

10) If a site was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

11) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Mr. Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov or by phone at (714) 484-5491.

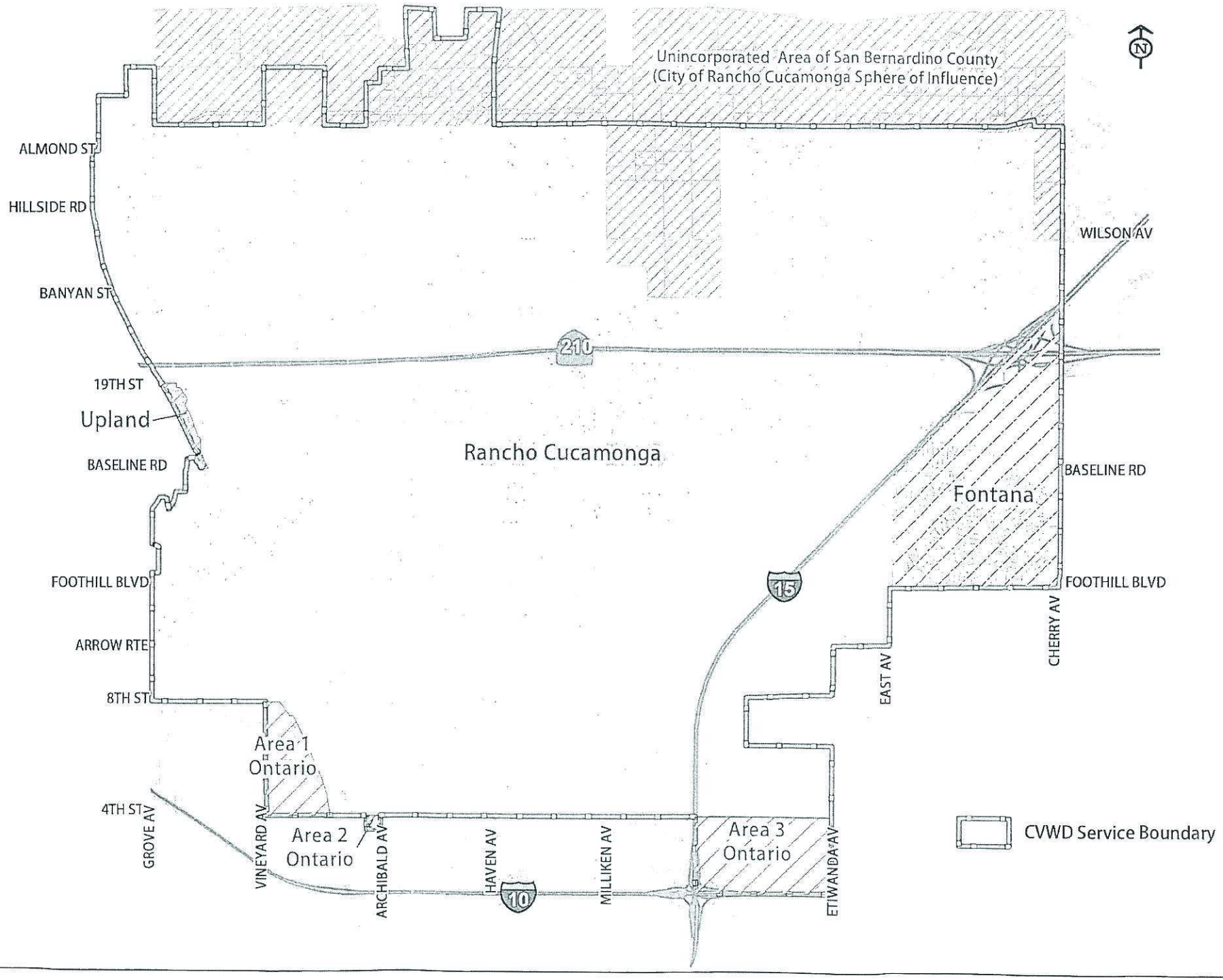
Sincerely,

Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program - Cypress Office

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
nritter@dtsc.ca.gov

CEQA# 2718


Unincorporated Area of San Bernardino County
(City of Rancho Cucamonga Sphere of Influence)
N
ALMOND ST
HILLSIDE RD
BANYAN ST
19TH ST
Upland
BASELINE RD
FOOTHILL BLVD
ARROW RTE
8TH ST
4TH ST
GROVE AV
Area 1
Ontario
VINEYARD AV
Area 2
Ontario
ARCHIBALD AV
HAVEN AV
MILLIKEN AV
Area 3
Ontario
ETIWANDA AV
Rancho Cucamonga
210
15
10
WILSON AV
BASELINE RD
Fontana
FOOTHILL BLVD
CHERRY AV
EAST AV
CVWD Service Boundary

Upland Unified School District
390 N. Euclid Avenue
Upland, CA 91786-4763
www.upland.k12.ca.us
(909) 985-1864

Gary Rutherford, Ed.D., Superintendent

Assistant Superintendents:
Deo Persaud, Business Services
Sherri L. Black, Human Resources
Linda Kaminski, Ed.D., Educational Services

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DEC 14 2009
COMMUNITY DEVELOPMENT

December 8, 2009

Sylvia Scharf, Project Manager
Community Development Department
City of Upland
460 North Euclid Avenue
Upland, California 91785

Dear Ms Scharf:

I write on behalf of the Board of Education of the Upland Unified School District (UUSD) in response to the Initial Study/Notice of Preparation of a Draft Environmental Impact Report for the Historic Downtown Upland Specific Plan Project, dated November 16, 2009.

First, we applaud and support the City's long-term plan to improve the downtown district by enhancing the residential, commercial, office industrial, open space and parking opportunities within this 210 acre historic project area. In accordance with your instructions, this letter constitutes written submission of specific environmental concerns germane to the Upland Unified School District's statutory responsibilities.

It is our understanding that the UUSD District Office, located at 390 North Euclid Avenue, is currently zoned Mixed Use which allows for a wide range of future development options. The Initial Study appears to place our property in a zone described as the Civic Center Downtown District. During a crippling fiscal crisis, and given the uncertainty of future state funding and enrollment trends, it is important that the District maintain maximum flexibility should it become necessary to sell or change uses for the building and parking lot. To that end, the District would oppose any zoning change that would limit or preclude options currently afforded in a Mixed Use designation.

Thank you for the opportunity to share our interests related to the potential effects of the project. I look forward to receiving a written response at your earliest appropriate opportunity.

Sincerely,

Gary Rutherford

Gary Rutherford, Ed.D.
Superintendent

cc: UUSD Board of Education

BOARD OF TRUSTEES: Linda Angona • Wes Fifield • Steve Frazee • P. Joseph Lenz • Michael J. Varela

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

Arnold Schwarzenegger, Governor

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DEC 14 2009
COMMUNITY DEVELOPMENT

December 9, 2009

Sylvia A. Scharf
City of Upland
460 North Euclid Avenue
Upland, CA 91786

RE: SCH#2009111055 Historic Downtown Upland Specific Plan; San Bernardino County.

Dear Ms. Scharf:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) regarding the above project. To adequately assess and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

- Contact the appropriate Information Center for a record search to determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.

✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

✓ Contact the NAHC for a Sacred Lands File Check.
  - **Check Completed with negative results, 12/09/09**
    The absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites (see below).

✓ Contact the NAHC for a list of appropriate Native American Contacts for consultation concerning the project site and to assist in the mitigation measures.
  - **Native American Contacts List attached**
    The NAHC makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received. If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information.

✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5 (e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

Katy Sanchez
Program Analyst
(916) 653-4040

CC: State Clearinghouse

Native American Contact
San Bernardino County
December 9, 2009

San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax
Serrano

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
(626) 286-1262 -FAX
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax
Gabrielino Tongva

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell
Gabrielino

Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
P.O. Box 86908
Los Angeles , CA 90086
samdunlap@earthlink.net
(909) 262-9351 - cell
Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
,
tattnlaw@gmail.com
310-570-6567
Gabrielino Tongva

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog.
12700 Pumarra Road
Banning , CA 92220
mcontreras@monongo-nsn.
(951) 755-5025
(951)201-1866 - cell
(951) 922-0105 Fax
Cahuilla
Serrano

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
tsen2u@live.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax
Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

San Manuel Band of Mission Indians
Ann Brierty, Policy/Cultural Resources Departmen
26569 Community Center. Drive
Highland , CA 92346
abrierty@sanmanuel-nsn.
(909) 864-8933 EXT-3250
(909) 649-1585 - cell
(909) 862-5152 Fax
Serrano

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2009111055 Historic Downtown Upland Specific Plan; San Bernardino County.

Native American Contact
San Bernardino County
December 9, 2009

Gabrielino Tongva Indians of California Tribal Council
Robert F. Doramae, Tribal Chair/Cultural
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Morongo Band of Mission Indians
Robert Martin, Chairperson
11581 Potrero Road Cahuilla
Banning , CA 92220 Serrano
Robert_Martin@morongo.
(951) 849-8807
(951) 755-5200
(951) 922-8146 Fax

Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive Serrano
Highland , CA 92346
(909) 862-9883

Ernest H. Siva
Morongo Band of Mission Indians Tribal Elder
9570 Mias Canyon Road Serrano
Banning , CA 92220 Cahuilla
(951) 849-4676
siva@dishmail.com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2009111055 Historic Downtown Upland Specific Plan; San Bernardino County.

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

December 14, 2009

Ms. Sylvia Scharf
AICP, Planning Manager
City of Upland
460 North Euclid Avenue
Upland, CA 91785

Dear Ms. Scharf:

Notice of Preparation of
Draft Environmental Impact Report for the Historic Downtown Upland Specific Plan Project

Thank you for your letter dated November 16, 2009, and a map showing the location of your proposed project in the city of Upland.

We reviewed the notice and documentation and determined the proposed Project is not regionally significant to The Metropolitan Water District of Southern California (Metropolitan). Metropolitan does not own or operate any facilities or maintain real estate entitlements within the footprint of the proposed Project; however, we support increased water conservation efforts and encourage projects to include water conservation measures such as using water efficient fixtures, drought-tolerant landscaping, and use of recycled water to offset increases in water use. Additional information on water conservation measures is available on Metropolitan's website at www.bewaterwise.com.

Should there be a change in the scope of the Project, we would appreciate the opportunity to review and comment at that time. If we can be of further assistance, please contact Mrs. Rebecca De Leon at (213) 217-6337.

Very truly yours,

Delaine W. Shane
Manager, Environmental Planning Team

RDL:
(J:\Environmmental Planning-Compliance\Becky\Comment Letters Sent\2009\December\Job No. 09121001)

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

ARNOLD SCHWARZENEGGER, *Governor*

December 18, 2009

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DEC 21 2009
COMMUNITY DEVELOPMENT

Sylvia Scharf
City of Upland
460 North Euclid Avenue
Upland, CA 91786

Dear Ms. Scharf:

Re: SCH# 2009111055; Historic Downtown Upland Specific Plan

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossings Engineering Section (RCES) is in receipt of the *Notice of Completion & Environmental Document Transmittal-Notice of Preparation* from the State Clearinghouse for the proposed specific plan. As stated in the Initial Study, the City plans to construct "(a) pedestrian crossing over the Metrolink tracks."

The proposed action of constructing the grade separation requires authorization from the Commission, under Public Utilities Code Section 1201-1205. City should arrange a meeting with RCES and Southern California Regional Rail Authority to discuss relevant safety issues and requirements of a submission of a formal application. More information can be found at: http://www.cpuc.ca.gov/PUC/Transportation/crossings/Filing+Procedures/crossingAppFAQs.htm.

Language should be in place so that any traffic impact studies undertaken should also address vehicular and pedestrian traffic increase impacts over affected crossings and associated proposed mitigation measures. Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad right-of-way.

If you have any questions, please contact Bill Lay, Utilities Engineer at 213-576-1399, bll@cpuc.ca.gov, or me at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

APPENDIX C
Traffic Impact Study

FEHR & PEERS
TRANSPORTATION CONSULTANTS

TRAFFIC IMPACT ANALYSIS FOR THE UPLAND DOWNTOWN SPECIFIC PLAN

IE09-0020

Submitted to:

City of Upland
460 N. Euclid Ave.
Upland, CA 91786

October 2010

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I. EXECUTIVE SUMMARY

Fehr & Peers has completed its assessment for the Upland Downtown Specific Plan. Downtown Upland is roughly bounded by Arrow Highway/10th Street to the north, 8th Street to the South, Campus Avenue to the east, and Euclid Avenue to the west. The project proposes to intensify downtown and create a more mixed-use environment, while improving roadways and parking facilities in Downtown Upland.

The Fehr & Peers assessment evaluates the following conditions:

- Existing Conditions – Consists of existing counts collected in the study area.
- Existing plus Project Conditions – Adds project traffic from full specific plan buildout to existing counts collected in the study area.
- Cumulative Conditions (2030) – Consists of existing counts collected in the study area with a projected 1% per year traffic growth to 2030 specific plan buildout.
- Cumulative with Project Conditions (2030) – Consists of Cumulative Conditions with project traffic from full specific plan buildout added.

The potential project impacts to the vehicular circulation and parking, pedestrian, transit, and bicycle facilities were assessed to identify if the proposed project results in a significant impact to area facilities. The intersections studied, whether there is a significant project impact at the intersection, under which analysis the impact occurs, and the identified significance after mitigation are summarized in Table ES-1 below. Table ES-2 documents the analysis of roadway segment impacts.

TABLE ES-1
INTERSECTION RESULTS SUMMARY

Study Intersection	Impact?	Analysis Scenarios where Impact Occurs	Significance After Mitigation
Foothill Boulevard/San Antonio Avenue	**Yes**	**Cumulative Plus Project**	**Less than Significant**
Foothill Boulevard/Euclid Avenue	**Yes**	**Cumulative Plus Project**	**Less than Significant**
Foothill Boulevard/Campus Avenue	No		
Foothill Boulevard/Grove Avenue	No		
Arrow Highway/San Antonio Avenue	No		
Arrow Highway/Euclid Avenue	No		
Arrow Highway/Second Avenue	No		
Arrow Highway/Campus Avenue	**Yes**	**Cumulative Plus Project**	**Less than Significant**
Arrow Highway/Grove Avenue	No		
9th Street/San Antonio Avenue	No		
9th Street/Euclid Avenue	No		
9th Street/Grove Avenue	No		
8th Street/San Antonio Avenue	No		
8th Street/Euclid Avenue			
8th Street/2nd Avenue	**Yes**	**Cumulative Plus Project**	**Less than Significant**
8th Street/Campus Avenue	**Yes**	**Existing Plus Project** **Cumulative Plus Project**	**Less than Significant** **Less than Significant**
8th Street/Grove Avenue	No		
7th Street/Euclid Avenue	No		
7th Street/2nd Avenue/I-10 Off Ramp	**Yes**	**Cumulative Plus Project**	**Less than Significant**
I-10WB On-Ramp/Euclid Avenue	No		
I-10WB On-Ramp Loop/Euclid Avenue	No		
I-10EB Ramps/Euclid Avenue	**Yes**	**Cumulative Plus Project**	**Less than Significant**

Note: Impacts indicated by Bold text, significant and unavoidable impacts noted by italics.
Source: Fehr and Peers, 2010.

TABLE ES-2
ROADWAY SEGMENT RESULTS

	Impact?	Analysis Scenarios where Impact Occurs	Significance After Mitigation
Euclid Ave (Major Arterial)			
7th Street to 8th Street	No		
8th Street to Arrow Highway	No		
Campus Ave (Secondary Arterial)			
7th Street to 8th Street	No		
8th Street to Arrow Highway	No		
Arrow Highway to Foothill Blvd	No		
8th Street (Collector)			
San Antonio Ave to Euclid Ave	No		
Euclid Ave to Campus Ave	No		
Arrow Route/Arrow Highway (Secondary Arterial)			
San Antonio Ave to Euclid Ave	No		

Source: Fehr & Peers, 2010

1. ANALYSIS PARAMETERS

This chapter outlines the geographic scope of the traffic impact analysis, including the study intersections and roadways, and the analysis methodologies and significance criteria employed in this study.

PROJECT DESCRIPTION

Upland's Historic Downtown is located between 8th Street, 10th Street, Euclid Avenue, and Campus Avenue. The Upland Metrolink station is located within Downtown Upland, as are retail stores, restaurants, former packing houses, and residential units. In the 1960's, the City installed a gazebo at the intersection of 2nd Street and 9th Street, establishing a central focal point in downtown.

In 2006, a private development study was conducted for downtown Upland, which identified some opportunities and constraints within the downtown core. The Specific Plan has provided additional analysis and a strategy for the future development of Downtown. The Specific Plan focuses on "districts" within downtown, each with its own feel, land use mix, and aesthetic. The overall vision is a walkable area that serves as a destination for Upland residents, with a mix of retail, commercial, and residential land uses. The proposed project intensifies existing land uses while also introducing live-work developments. With full build-out, downtown will be denser, with more residences, office spaces, and retail outlets.

In addition to changes in land use, the Specific Plan intends to introduce new parking areas and provide additional and improved pedestrian facilities. A pedestrian bridge connecting the Residential Transit District south of the SPRR tracks to the Citrus Transit District and Old Town Historic district north of the SPRR tracks is one proposed improvement. Additionally, the City strives to maintain a complete streets system, with access for all modes of transportation cornerstone to new development.

PROJECT STUDY AREA

The project is roughly bounded by Euclid Avenue to the west, Arrow Highway to the north, Campus Avenue to the east, and 8th Street to the south. The study area is bounded by San Antonio Avenue to the west, Foothill Boulevard to the north, Grove Avenue to the east, and I-10 to the south. The major roadways within the study area include the aforementioned roadways in addition to 9th Street, 7th Street, and 2nd Avenue. All study intersections are within the City of Upland, although intersections with freeway ramps are under the jurisdiction of Caltrans. Figure 1 shows the project study area.

PROJECT STUDY INTERSECTIONS

Within the study area, the following intersections were selected for analysis based on a review of the roadway network, proximity to downtown Upland, and access through the downtown:

- Foothill Boulevard/San Antonio Avenue
- Foothill Boulevard/Euclid Avenue
- Foothill Boulevard/Campus Avenue
- Foothill Boulevard/Grove Avenue
- Arrow Highway/San Antonio Avenue
- Arrow Highway/Euclid Avenue
- Arrow Highway/Second Avenue
- Arrow Highway/Grove Avenue
- 9th Street/San Antonio Avenue

- 9th Street/Euclid Avenue
- 9th Street/Grove Avenue
- 8th Street/San Antonio Avenue
- 8th Street/Euclid Avenue
- 8th Street/2nd Avenue
- 8th Street/Campus Avenue
- 8th Street/Grove Avenue
- 7th Street/Euclid Avenue
- 7th Street/2nd Avenue
- 10WB On-Ramp/Euclid Avenue
- 10WB On-Ramp Loop/Euclid Avenue
- 10EB Ramps/Euclid Avenue

Figure 2 identifies study intersections and geometrics.

PROJECT ROADWAYS

Within the study area, the following roadway segments were selected for analysis based on a review of the roadway network and circulation through downtown Upland:

- Euclid Avenue (Major Arterial)
  - 7th Street to 8th Street
  - 8th Street to Arrow Highway
- Campus Avenue (Minor Arterial)
  - 7th Street to 8th Street
  - 8th Street to Arrow Highway
  - Arrow Highway to Foothill Boulevard
- 8th Street (Collector)
  - San Antonio Avenue to Euclid Avenue
  - Euclid Avenue to Campus Avenue
- Arrow Highway (Minor Arrterial)
  - San Antonio Avenue to Euclid Avenue

Figure 3 identifies study roadway segment classification.

ANALYSIS SCENARIOS

Our analysis scenarios include the existing and cumulative (year 2030) scenarios for the Specific Plan area. Year 2030 is the anticipated year of Specific Plan Buildout. The analysis scenarios are:

- Existing
- Existing plus Project
- Cumulative (2030)
- Cumulative plus Project (2030)

ANALYSIS METHODOLOGIES

Operations

The intersection analysis employs a methodology based on empirical research conducted by the Transportation Research Board and other authorities.

Signalized intersection operations are evaluated using methodologies provided in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board). These methodologies assess average control delays and then assign a corresponding letter grade that represents the overall condition of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. For this study, levels of service are calculated using Synchro 6.0 software, which implements 2000 HCM methodologies. Synchro software allows the input of signal timing and coordination data to more accurately reflect actual conditions. Descriptions of the LOS letter grades for signalized intersections are provided in Table 1.

Table 1 also documents the relationship between the various volume-to-capacity (V/C) ratios, Delay, and Level of Service for signalized intersections, while Table 2 provides the LOS value at various levels of delay for unsignalized intersections. Please note that V/C ratios are provided as they are used in the impact assessment based on requirements set forth by the San Bernardino County Congestion Management Program (CMP).

TABLE 1
SIGNALIZED INTERSECTION LOS CRITERIA

Level of Service	Description	V/C Ratio	Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0.000-0.600	≤ 15.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	0.601-0.700	> 15.0 to 25.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	0.701-0.800	> 25.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	0.801-0.900	> 35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	0.901-1.000	> 55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Over 1.000	> 80.0

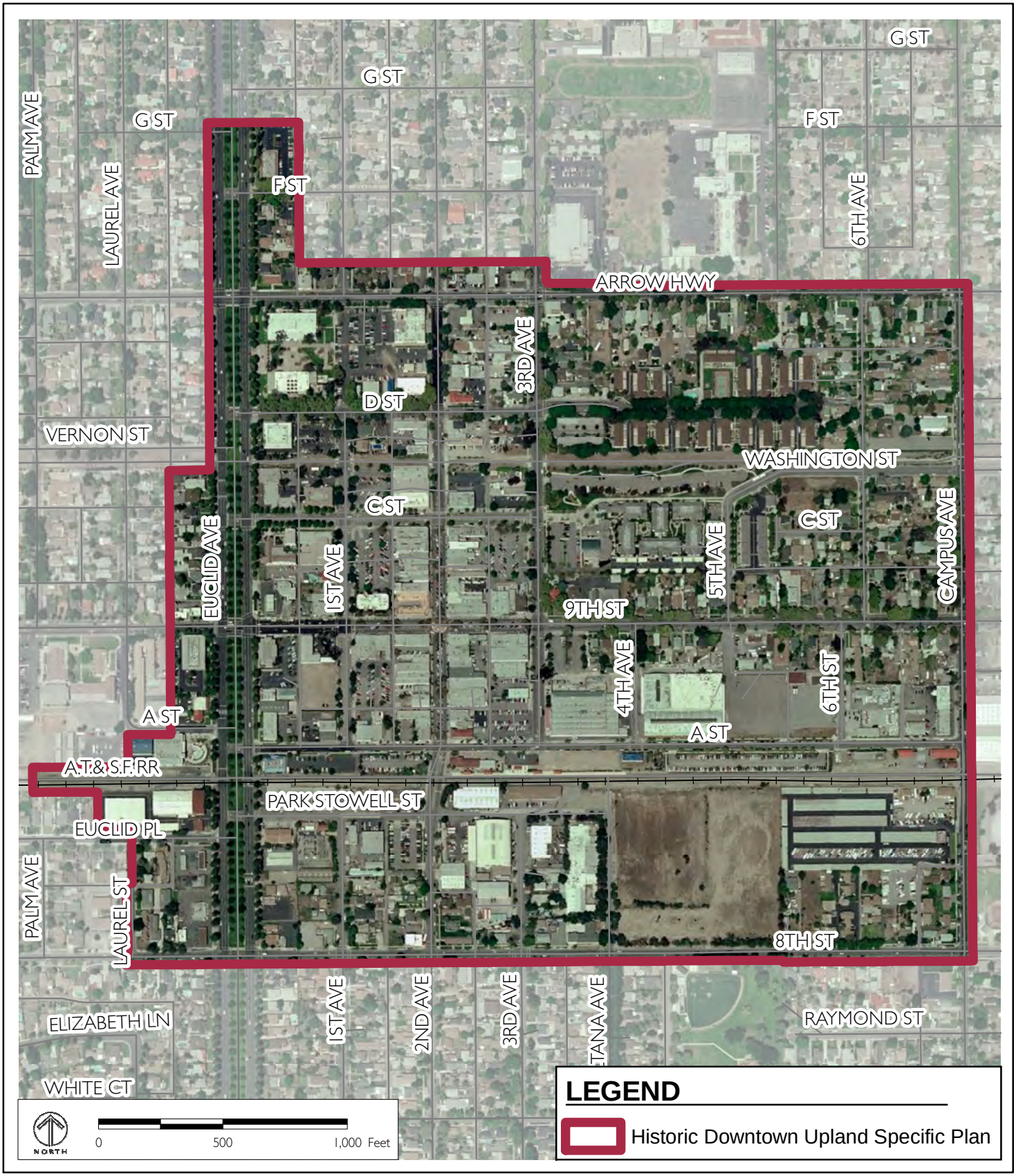
Note: The San Bernardino CMP guidelines consider all intersections with a V/C ratio above 1.0 to be operating at LOS F, regardless of delay LOS.
Source: *Highway Capacity Manual* (Transportation Research Board, 2000).

TABLE 2

UNSIGNALIZED INTERSECTION LOS CRITERIA

Level of Service	Description	Delay
A	Little or no delays	≤ 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

Source: *Highway Capacity Manual* (Transportation Research Board, 2000).



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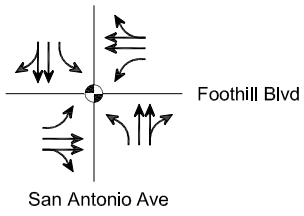
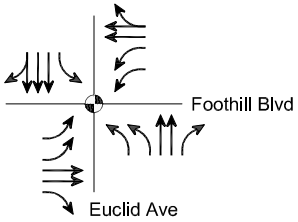
STUDY AREA
FIGURE 1

EXISTING CONDITIONS

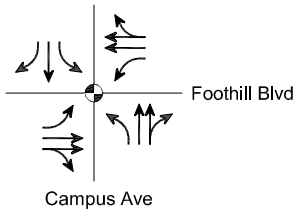
1. San Antonio Ave & Foothill Blvd



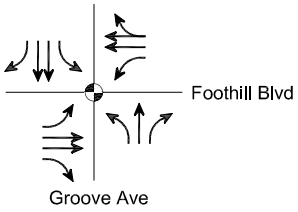
2. Euclid Ave & Foothill Blvd



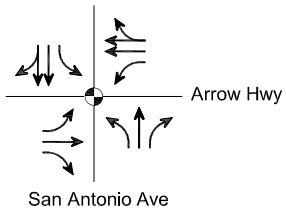
3. Campus Ave & Foothill Blvd



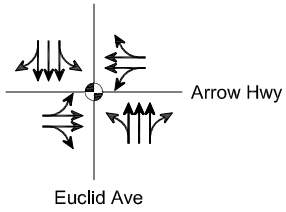
4. Grove Ave & Foothill Blvd



5. San Antonio Ave & Arrow Hwy



6. Euclid Ave & Arrow Hwy



LEGEND

Signalized

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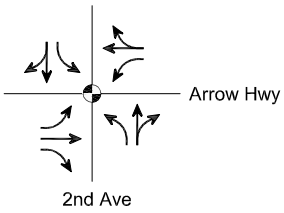
INTERSECTION LANE CONFIGURATIONS

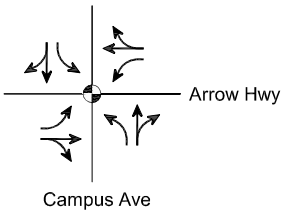
FIGURE 2

EXISTING CONDITIONS

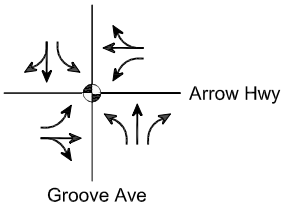
7. 2nd Ave & Arrow Hwy



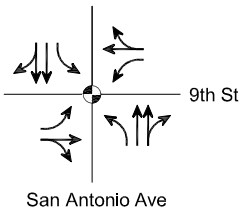
8. Campus Ave & Arrow Hwy



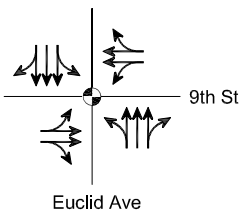
9. Grove Ave & Arrow Hwy



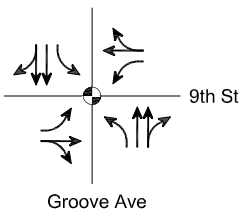
10. San Antonio Ave & 9th St



11. Euclid Ave & 9th St



12. Grove Ave & 9th St



LEGEND

Signalized

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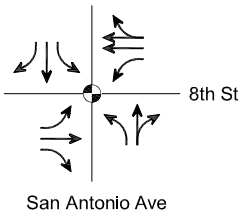
INTERSECTION LANE CONFIGURATIONS

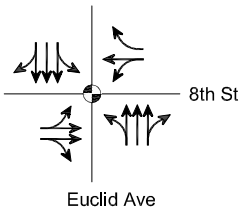
FIGURE 2

EXISTING CONDITIONS

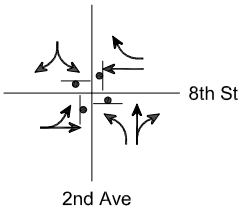
13. San Antonio Ave & 8th St



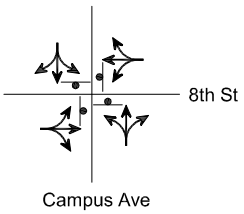
14. Euclid Ave & 8th St



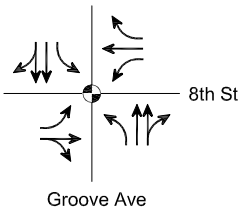
15. 2nd Ave & 8th St



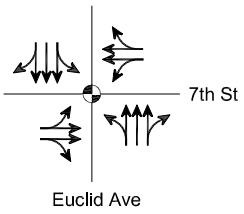
16. Campus Ave & 8th St



17. Grove Ave & 8th St



18. Euclid Ave & 7th St



LEGEND

- Signalized
- Stop-Controlled

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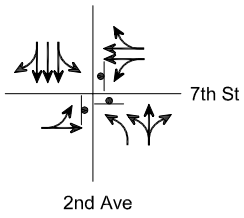
INTERSECTION LANE CONFIGURATIONS

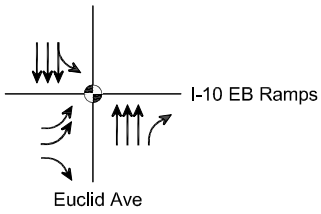
FIGURE 2

EXISTING
CONDITIONS

19. 2nd Av &
7th St



20. Euclid Ave &
I-10 EB Ramps



LEGEND

Signalized
Stop-Controlled

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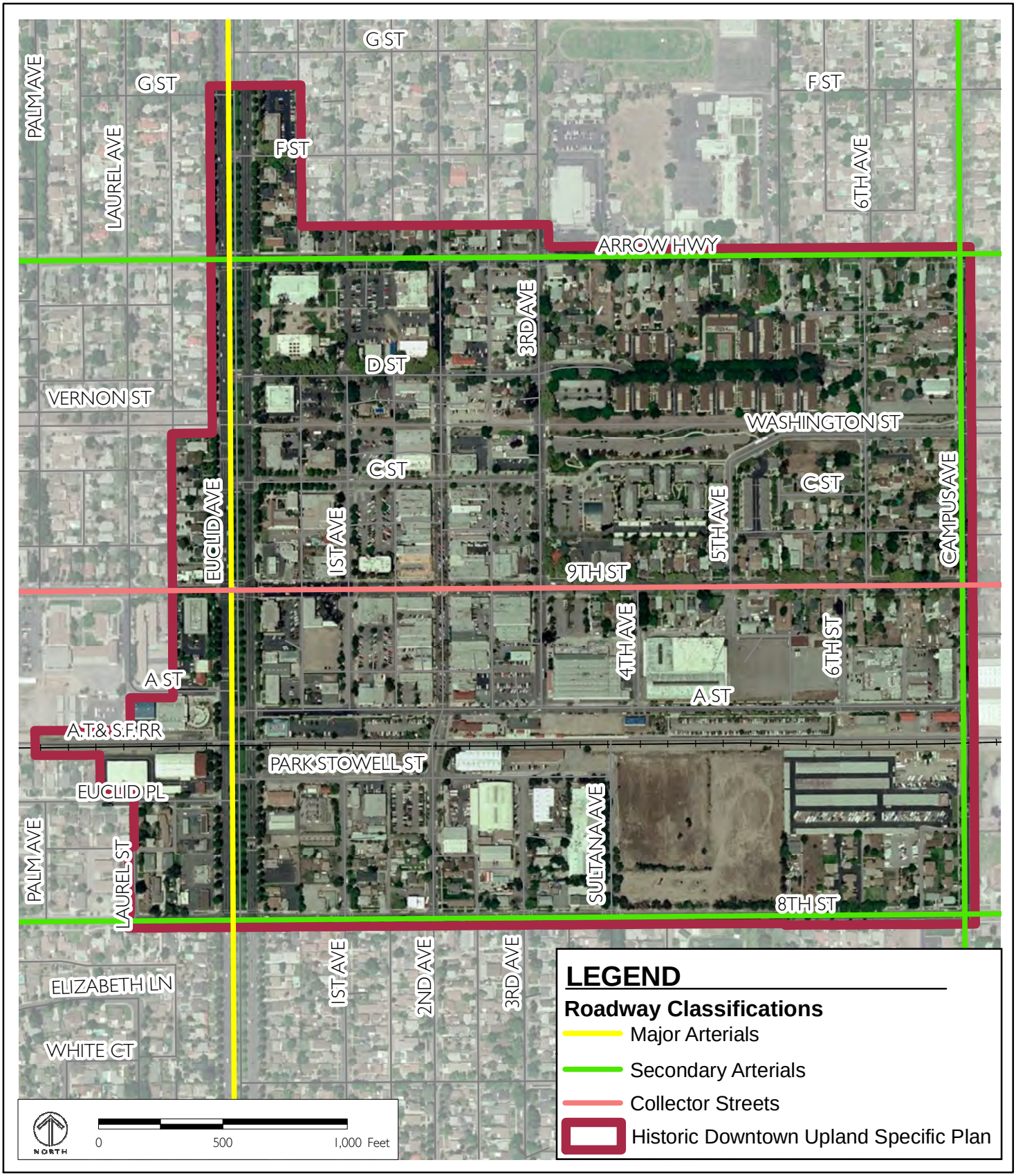
INTERSECTION LANE CONFIGURATIONS

FIGURE 2



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ROADWAY FACILITIES
FIGURE 3

Traffic Forecasts

Several sets of traffic forecasts were developed to evaluate the project. These forecasts are described in detail below:

Project Traffic Forecasts

Net new land use from specific plan redevelopment was input into the Upland Travel Demand Forecasting (TDF) model by TAZ. The Upland TDF model is in the process of development as part of the Upland General Plan and has been validated beyond Caltrans model development guidelines. The model is built on a TransCAD 5.0 platform and land use is input based on number of dwelling units or square footage of a commercial or office land use. The model takes into account average trip length and screenlines developed from the SCAG regional travel model to identify routing of trips within Upland.

Cumulative Traffic Forecasts

Because the Upland TDF model's future scenario is currently being developed as part of the General Plan, cumulative forecasts were developed for the City using a growth rates forecasted in the SCAG regional travel model.

Trip Generation

We estimated growth in trips to and from Upland using trip generation rates embedded within the Upland TDF model. These rates are based on both ITE and observed trip generation for areas similar to Upland. The land use trip generation rates used for the specific plan analysis are presented in Table 3. The Upland TDF model first forecasts daily trip generation and distribution, and later assigns traffic to the roadway network. To obtain AM and PM peak hour forecasts, the model applies hourly factors by trip purpose to the assigned trips.

Table 4 summarizes the expected daily trip generation for the downtown Specific Plan area, based on model inputs. Because the model matches productions and attractions, trips generated in downtown may cause a shift elsewhere in the model, since individuals in Upland may now choose to go to downtown for a trip purpose (such as shopping) *instead of* another location elsewhere in Upland. Additionally, some trips may be internalized within a TAZ, since downtown Upland will be mixed-use in nature, where residents can live, work, and shop.

Trip Distribution

Trip distribution was completed using the Upland TDF model. Trip distribution within the model was developed with consideration to the SCAG regional model external-external (X-X) trip matrices, data collection, and review of friction factors and average travel lengths. First, a subarea extraction for the Upland model area was conducted within the SCAG model. The results of this extraction were used to develop the X-X trip matrix. Daily traffic counts were conducted at each of the model gateways to compare the X-X matrix to total traffic and to develop station weights for I-X trip tables. Census travel data (CTPP) was analyzed in developing average trip lengths and friction factors; friction factors identify the probability that a trip would be made depending on travel time. The outputs of the trip distribution step are trip tables with origin and destination TAZs.

Trip Assignment

Based on trip distribution, trips are assigned to the roadway network within the model. Using the origin and destination tables from trip distribution, the model seeks to assign trips along the fastest, shortest routes between

the two TAZs. Arterial roadways are generally the most attractive because they have the largest hourly capacity and fastest speeds. The model, however, takes into account congested speed, so if a roadway such as Euclid Avenue gets an influx of traffic, thus slowing down its speed, then trips may be assigned to a minor arterial or collector road.

TABLE 3

MODEL TRIP GENERATION RATES

Land Use	Trip Generation Rate	Major Function
Single Family Residential	9.00/DU	Production
Multi Family Residential (Rental)	4.99/DU	Production
Condo/Townhouse (Owner)	7.00/DU	Production
Restaurant	89.95/KSF	Attraction
General Commercial	35.00/KSF	Attraction
Office	11.01/KSF	Attraction
Financial Building	148.15/KSF	Attraction
Light Industrial	6.97/KSF	Attraction
Industrial	1.50/KSF	Attraction

Source: Fehr & Peers, 2009

TABLE 4

DOWNTOWN TRIP GENERATION

Land Use	Land Use Change		Daily Trips	
			Rate	Total Daily
Single Family Residential	-15	DU	9.00	-135
Multi-Family Residential	+436	DU	4.99	4,351
Condo/Townhouse	+419	DU	7.00	3,353
Restaurant	-4.4	KSF	89.95	-396
General Commercial	+186	KSF	35.00	6,510
Office	+34	KSF	11.01	374
Financial Building	-9	KSF	148.15	-1,333
Light Industrial	-148.7	KSF	6.97	-1,036
Industrial	-244	KSF	1.50	-366
Total Daily Trip Generation				11,322

Sources: *Trip Generation* (8th Ed.), (Institute of Transportation Engineers), Fehr and Peers, 2009.

SIGNIFICANCE CRITERIA

The City of Upland strives to maintain a minimum LOS D at City intersections. The City, however, does not maintain significance criteria for conducting traffic studies. Therefore, we used information from their existing General Plan, significance criteria from previous Upland traffic studies, and standard engineering guidelines to develop significance criteria for this project.

1. The project will disrupt existing traffic operations. Traffic operations were assessed using both quantitative (Level of Service (LOS)) and qualitative criteria. A disruption of traffic operations is defined as any of the following, and is summarized in Tables 5 and 6:

    a. The addition of project traffic causes a roadway segment operating at LOS D or better to degrade to LOS E or F with the introduction of project trips (City of Upland threshold).
    b. The addition of project traffic causes a signalized intersection to operate at LOS D or worse with an increase in delay above the following thresholds:
        - For an LOS D intersection, an increase in delay greater than 5 seconds
        - For an LOS E intersection, an increase in delay greater than 2 seconds
        - For an LOS F intersection, an increase in delay greater than 1 second

        (City of Upland threshold).
    c. The project adds 10 or more trips at an unsignalized intersection, causing the intersection to operate at LOS E or F, if the intersection meets signal warrants (standard engineering practice).
    d. The addition of 10 or more project trips at an unsignalized intersection already operating at LOS E or F, if the intersection meets signal warrants (standard engineering practice).
    e. A project interferes with, conflicts with or precludes other planned improvements such as roadway extensions/expansions, planned trail facilities, proposed creek restoration projects, etc. (consistent with CEQA guidelines).
    f. A project conflicts or creates inconsistencies with adopted traffic plans, guidelines, policies or standards (consistent with CEQA guidelines).
    g. The construction of a project creates a temporary but prolonged impact due to lane closures, need for temporary signals, emergency vehicles access, traffic hazards to bikes/pedestrians, damage to roadbed, truck traffic on roadways not designated as truck routes, etc. (consistent with CEQA guidelines).

2. For CMP intersections, a V/C ratio of 1.0 or greater is considered to be LOS F, regardless of intersection delay LOS. The significance criteria identified in the San Bernardino CMP guidelines and consistent with standard traffic engineering practice for intersection operations are summarized in Tables 5 and 6.

TABLE 5

CMP SIGNALIZED INTERSECTION SIGNIFICANCE CRITERIA

Level of Service	Threshold
D	Degrades to E or F
E	Any change in V/C or Delay
F	Any change in V/C or Delay

Source: *City of Upland*

TABLE 6

CMP UNSIGNALIZED INTERSECTION SIGNIFICANCE CRITERIA

Level of Service	PROJECT TRIPS
E	10 or More
F	10 or More

Source: *Fehr & Peers, 2009.*

3. Transit impacts are considered significant if:

    a. A project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions caused by proposed-project driveways on transit streets and impacts to transit stops/shelters; and impacts to transit operations from traffic improvements proposed or resulting from a project (consistent with CEQA guidelines).
    b. A project interferes with planned transit services or facilities (consistent with CEQA guidelines).
    c. A project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies or standards (consistent with CEQA guidelines).
    d. A project creates demand for public transit services above the capacity which is provided, or planned (consistent with CEQA guidelines).

4. Bicycle impacts are considered significant if:

    a. A project disrupts existing bicycle facilities (consistent with CEQA guidelines).
    b. A project interferes with planned bicycle facilities. This includes failure to dedicate right-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Master Plan or to contribute toward construction of planned bicycle facilities along the project's frontages (consistent with CEQA guidelines).
    c. A project conflicts or creates inconsistencies with adopted bicycle system plans, guidelines, policies or standards (consistent with CEQA guidelines).

5. Pedestrian impacts are considered significant if:

a. A project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian or bicycle traffic to an area experiencing pedestrian safety concerns such as an adjacent crosswalk or school, particularly if the added traffic reduces the number of pedestrian acceptable gaps at unsignalized crossings or cause queues to spillback through pedestrian crossings (consistent with CEQA guidelines).

b. A project interferes with planned pedestrian facilities. In existing and/or planned urbanized areas, main streets or pedestrian districts, this can include impacts to the quality of the walking environment (consistent with CEQA guidelines).

c. A project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies or standards (consistent with CEQA guidelines).

2. EXISTING CONDITIONS

This chapter discusses the existing transportation conditions in the project study area. This discussion addresses the roadway network, the bus and rail transit network, the existing bicycle and pedestrian facilities, and current intersection operations.

DOWNTOWN UPLAND

Downtown Upland is a historic area in the southeast portion of the City of Upland. This area is home to the Upland Metrolink Station and is located proximate to I-10 and the City of Ontario. Downtown Upland was previously home to industrial uses, such as packing houses, although over time these spaces became underutilized. Today, downtown Upland still has some industrial land uses, but is also home to small retail storefronts and offices, multi-family apartments, and single family homes. The land uses tend to be separated, with retail and offices centered around the Old Town Historic District near the intersection of 2nd Avenue and 9th Street, multi-family units and industrial land uses south of the SPRR tracks, and single family homes in the periphery of downtown.

EXISTING ROADWAY FACILITIES

The project study area is generally bounded by Foothill Boulevard to the north, I-10 to the south, San Antonio Avenue to the west, and Campus Avenue to the east. Major roadways within the study area include:

I-10 is an east-west freeway, which provides direct access to the City of Upland and its downtown by way of on-off ramps located at Euclid Avenue. I-10 has limited access, and generally has five travel lanes in each direction, including one high occupancy vehicle (HOV) lane in the vicinity of the project site. I-10 begins at its junction with the Pacific Coast Highway in Santa Monica, CA and travels east through the United States, terminating in Jacksonville, FL.

Euclid Avenue (State Route 83) is a major arterial roadway that extends north-south in the City of Upland and in the adjacent City of Ontario. Euclid Avenue is the major north-south arterial within downtown Upland. It has a right-of-way width of 200 feet with a landscaped median island. The median causes the roadway to form a 'couple system' with travel restricted to only one direction in each leg of the couple. Near the project site, there are six travel lanes, with a speed limit of 45 miles per hour.

Foothill Boulevard (State Route 66) is a major arterial road that travels east-west in the City of Upland, just north of downtown Upland. It is a four-lane divided roadway with a right-of-way width between 170 and 214 feet. In some locations, Foothill Boulevard has a parallel frontage road. The posted speed limit along Foothill Boulevard is 45 miles per hour.

8th Street is a secondary arterial roadway that extends east-west from Benson Avenue to the east city limits. 8th Street is generally the southern boundary of downtown Upland. In downtown Upland, 8th Street is a two-lane undivided roadway with a speed limit of 35 miles per hour.

Arrow Highway/10th Street is a secondary arterial that extends east-west from the west city limits to the east city limits. Arrow Highway is generally the northern boundary of downtown Upland, and is a two-lane undivided roadway within the downtown, with a speed limit of 35 miles per hour.

Campus Avenue is a secondary arterial extending north-south from the south city limits to 24th Street. Campus Avenue is generally the eastern boundary of downtown Upland, where it has four travel lanes and a speed limit of 35 miles per hour.

San Antonio Avenue is a north-south secondary arterial connecting Upland to the City of Ontario. It is a four-lane undivided roadway and has a posted speed limit of 35 miles per hour.

Minor roadways within the study area include:

9th Street is an east-west collector street and is a two-lane undivided roadway through downtown Upland with a speed limit of 30 miles per hour. There is a gazebo at 9th Street's intersection with Second Avenue, forming a traffic circle. 9th Street has angled parking in its median between First Avenue and Third Avenue.

Second Avenue is a north-south collector street with a two-lane undivided roadway through downtown Upland. Second Avenue has a speed limit of 30 miles per hour. The gazebo at its intersection with 9th Street forms a traffic circle. There is angled parking in the median of Second Avenue between A Street and C Street.

Figure 3 identifies the downtown roadway network by functional classification.

EXISTING TRANSIT FACILITIES

There are four bus transit lines and one rail transit line operating within the project study area. The bus lines are operated by Omnitrans, which provides service within San Bernardino County. The rail line is operated by Metrolink, a regional heavy rail operator for Southern California.

- Omnitrans Route 63 – Route 63 provides service between the cities of Upland, Ontario, and Chino. Near the study area, Route 63 travels along San Bernardino Avenue, Grove Avenue, Foothill Boulevard, and Campus Avenue. Route 63 travels at 30-minute headways during the week and at 60-minute headways on the weekend.

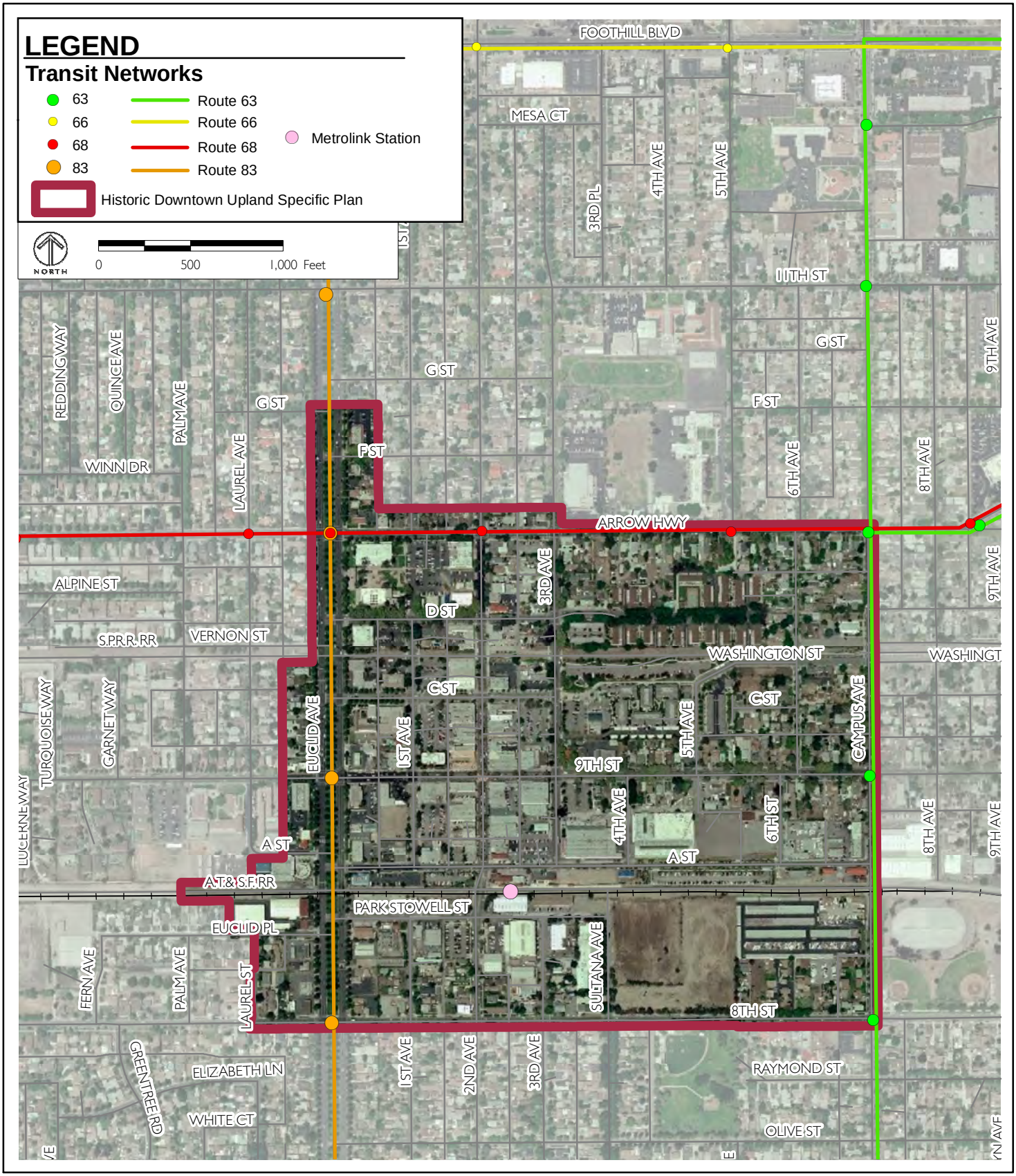
- Omnitrans Route 66 – Route 66 connects the City of Upland with the cities of Fontana and Montclair. It also acts as a connection between Upland and the Montclair Metrolink Station. Near the study area, Route 66 travels along Foothill Boulevard. Route 66 operates at 15-30 minute headways during the week and at 30 minute headways on the weekend.

- Omnitrans Route 68 – Route 68 connects the City of Upland to the City of Chino, stopping at the Chino Transit Center. Near the study area, Route 68 travels along San Bernardino Road and Arrow Highway. Route 68 runs 6 days a week, with 30-minute headways during the week and 60-minute headways on Saturdays.

- Omnitrans Route 83 – Route 83 connects the City of Upland with the City of Chino. Near the study area, Route 83 travels along Euclid Avenue. Route 83 runs on Sundays only, and operates at 60-minute headways.

- Metrolink San Bernardino Line – The San Bernardino line is a commuter rail line connecting San Bernardino County cities and eastern Los Angeles County cities with downtown Los Angeles. The San Bernardino Line has a stop in Upland, near the intersection of Third Avenue and A Street. The San Bernardino Line operates at 20-75 minute headways on weekdays, with shorter headways in the peak direction of traffic, and at 65-minute to 3-hour headways on weekends.

Figure 4 identifies the existing transit network.



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TRANSIT NETWORK
FIGURE 4

PEDESTRIAN AND BICYCLE FACILITIES

Crosswalks

All signalized and all-way stop controlled intersections in downtown Upland have crosswalks on all approaches to the intersection. At many of the side-street stop controlled intersections, crosswalks are only provided parallel to the major roadway. Figure 5 identifies the locations and crosswalk types within downtown Upland.

Sidewalks

In the downtown area north of A Street, all of the roadways have sidewalks ranging in width from approximately 5-8 feet. South of A Street, there are sidewalks present on most streets, however they are typically a narrower 4-5 feet wide. There are sidewalks missing along Stowell Avenue, which is a largely industrial area.

The sidewalk quality varies within downtown Upland. In the Old Town Historic District, centered by Second Avenue and 9th Street, sidewalks are generally of good quality. West of this area, however, many sidewalks are of poor quality as a result of trees uprooting and creating uneven and broken pavement surfaces.

Figure 6 identifies sidewalk facilities in downtown Upland.

Bicycle Facilities

There are Class I, II, and III facilities in and around downtown Upland, as defined below:

- A Class I facility is an off-street bicycle path. This type of facility is physically separated by automobile traffic, and may be used by both bicyclists and pedestrians.
- A Class II/III facility is an on-street bicycle path. A Class II facility is a marked route delineated by signs and a striped bicycle lane. When on-street parking is available, the bicycle lane is striped between the parking lane and the traffic lane. A Class III facility is similar to a Class II facility, with the exception that the bicycle lane is not striped along the facility and is typically delineated with signage.

There is a Class I bicycle facility that runs through the City of Upland between C Street and D Street. Through a portion of the downtown, the bicycle trail also serves as a median along Washington Boulevard. There is a Class II bicycle facility along Euclid Avenue between 9th Street and D Street. This bike lane connects to the Class I path.

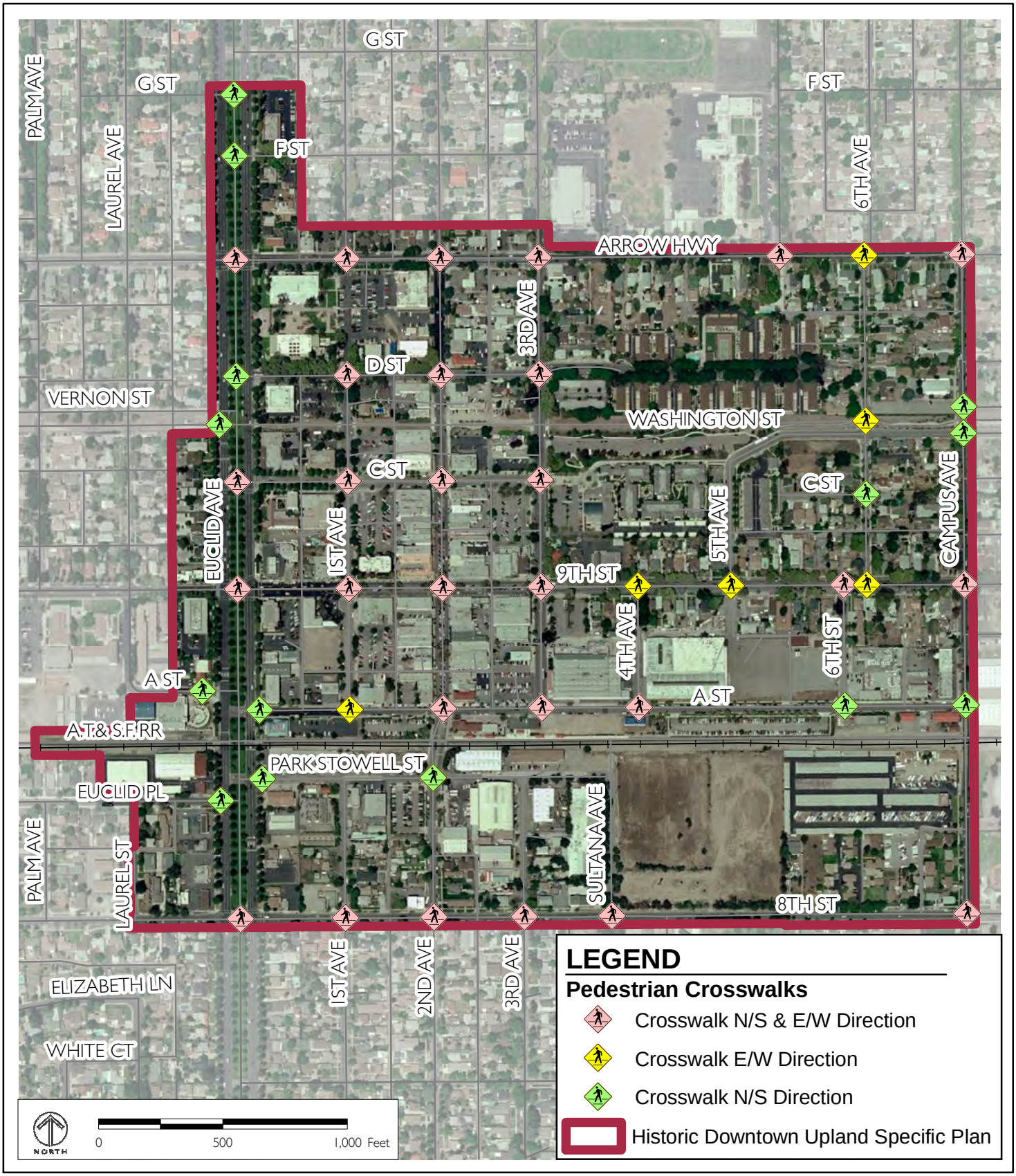
There is signage and rumble strips present along the roadways that intersect with the Class I bicycle path, intended to alert drivers of the intersection. Rumble strips are a road safety feature that alert drivers by causing a tactile vibration and audible rumbling, and consist of raised dots placed in strips on pavement.

Figure 7 identifies bicycle facilities in downtown Upland.

TRAFFIC DATA COLLECTION

Intersection traffic counts were collected between 2006 and 2009 for intersections in and around downtown Upland. Counts were collected from 7 AM to 9 AM and from 4 PM to 6 PM. The highest one-hour peak of traffic volumes during both the morning and evening hours were shown on Figure 8 and are documented in Appendix A.

Existing signal timings were obtained from the jurisdiction maintaining the signals. All peak hour factors used in the assessment were field measured.



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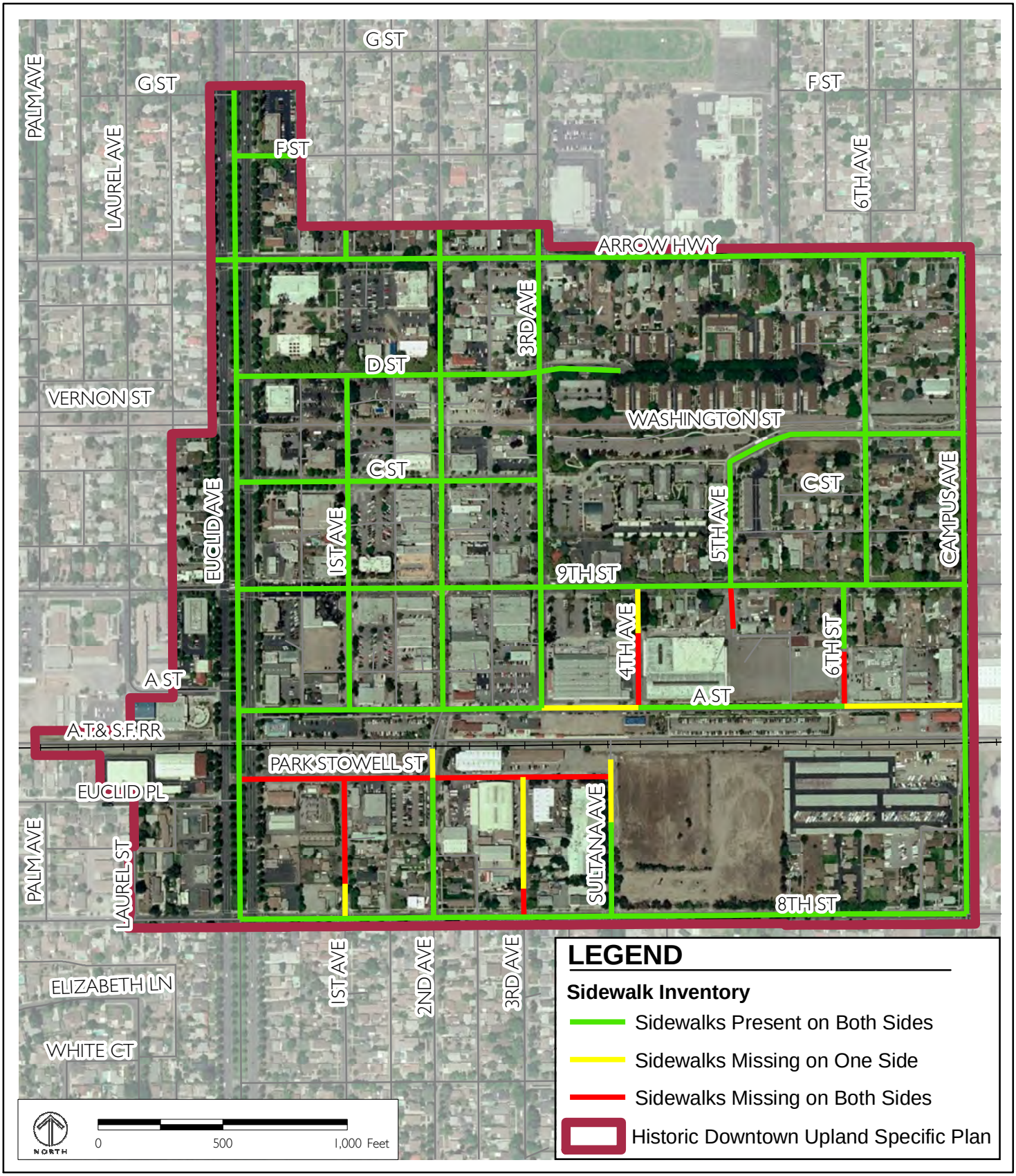
PEDESTRIAN CROSSWALKS
FIGURE 5



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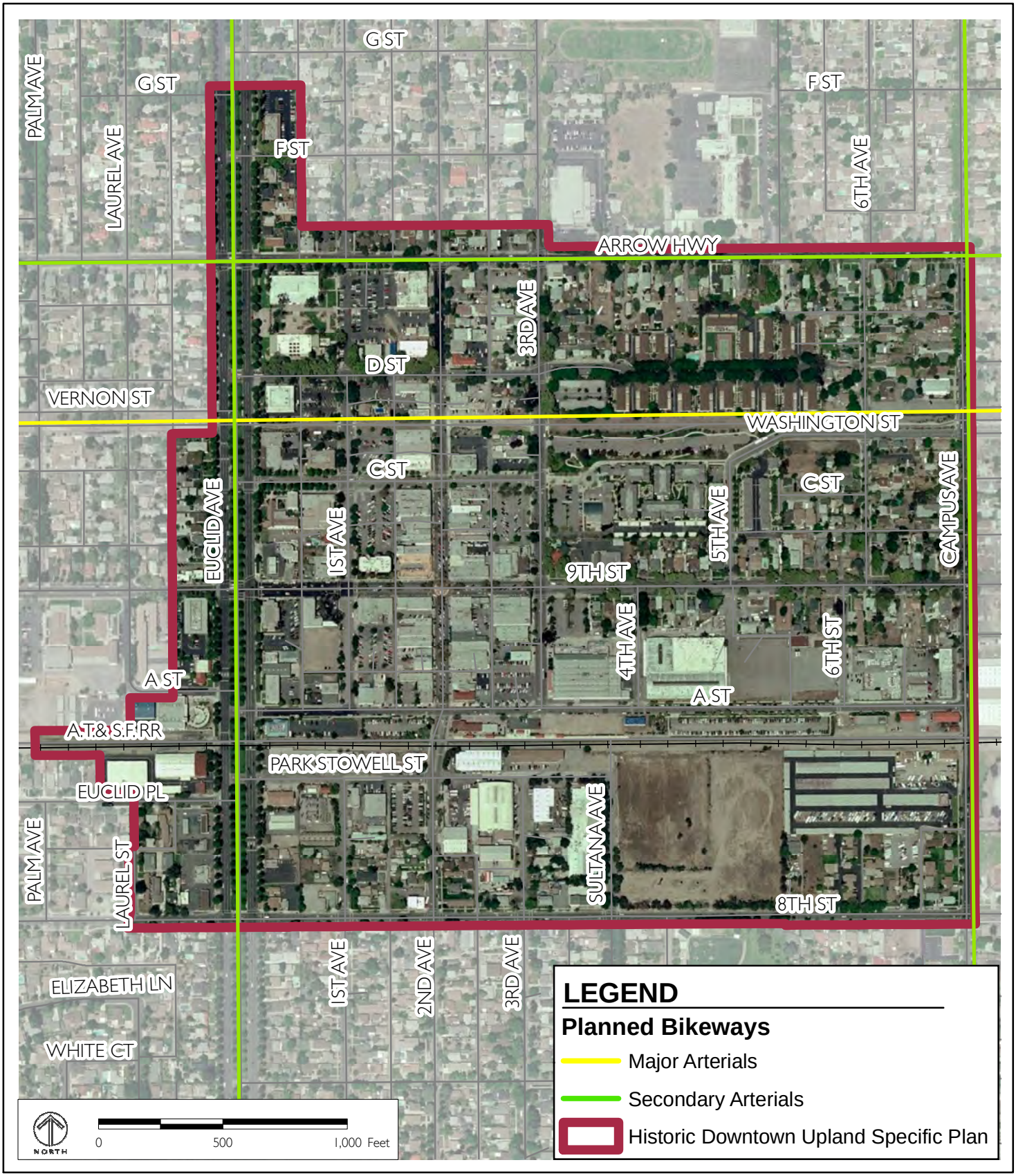
SIDEWALKS
FIGURE 6



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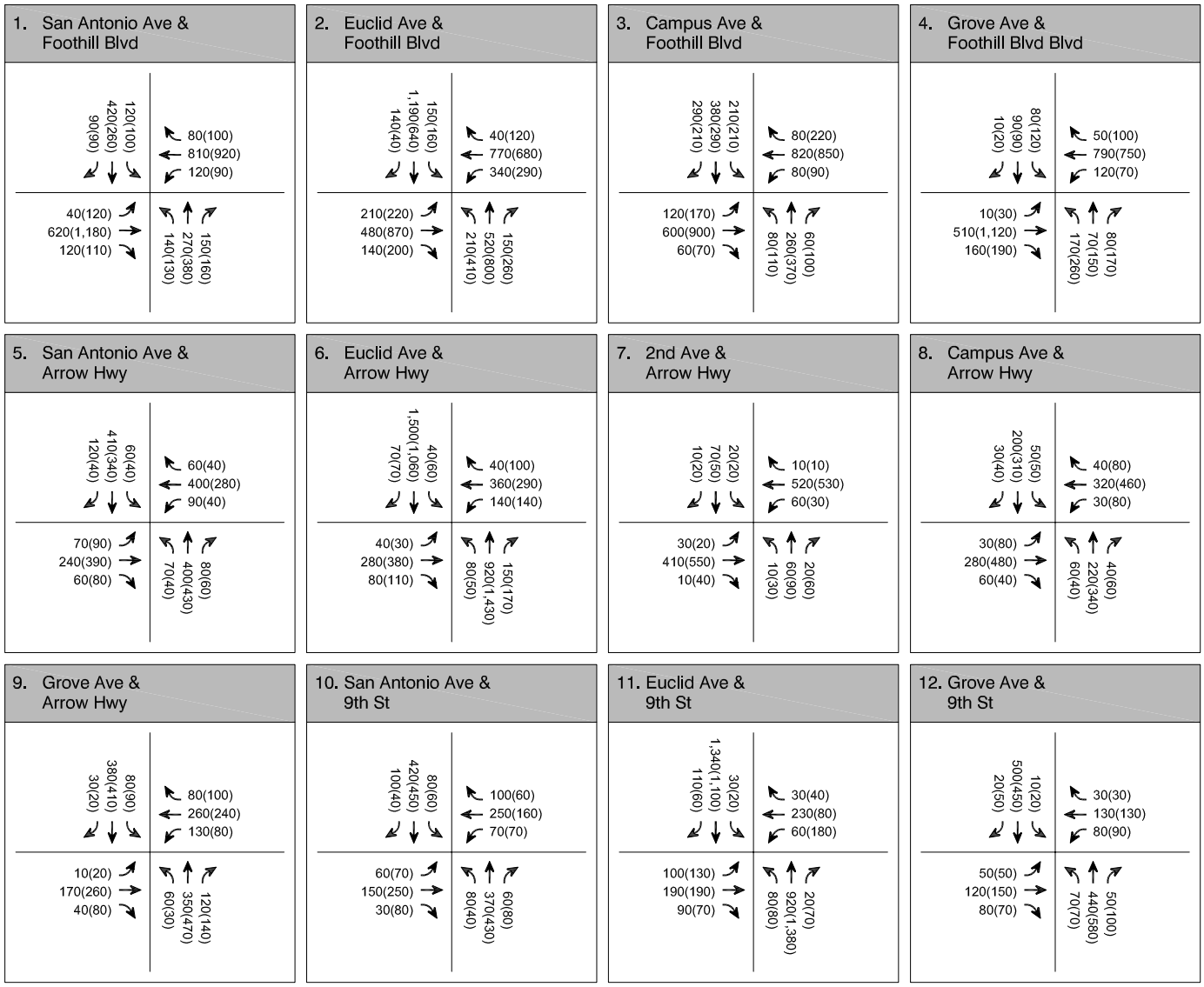
BICYCLE NETWORK
FIGURE 7



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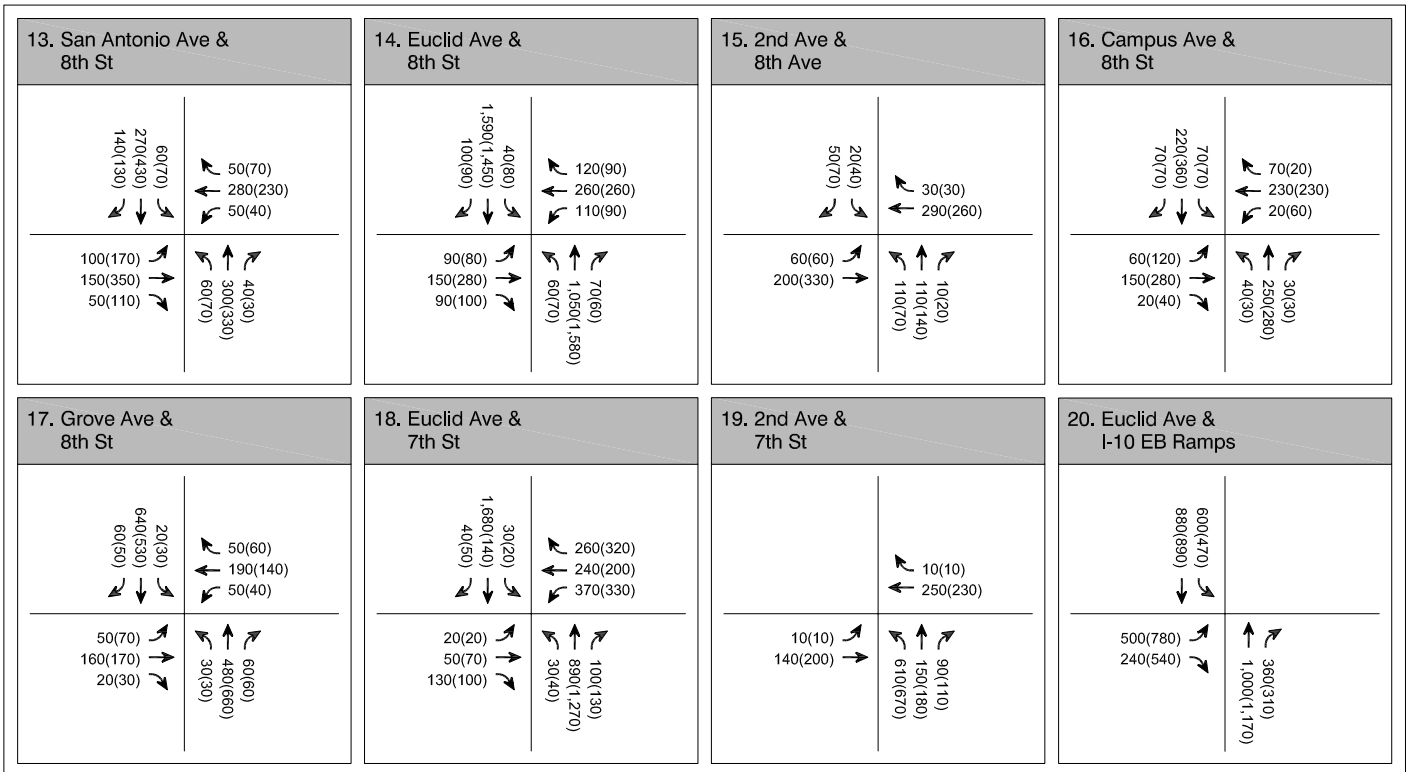
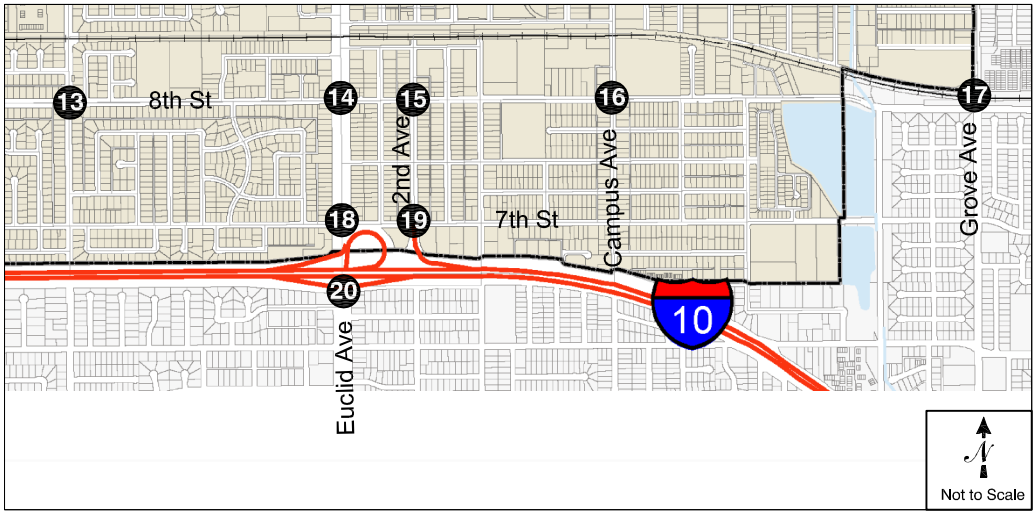
EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 8



LEGEND

- Project Site
- Analyzed Intersection
- X(X) AM(PM) Peak Hour Traffic Volumes
- Turn Lane
- Traffic Signal
- Stop Sign
- Railroad



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EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 8

EXISTING INTERSECTION CONDITIONS

As shown in Table 7, most of the intersections currently operate at an acceptable Level of Service of D or better during peak periods. The following intersections currently operate at a deficient Level of Service during one or more peak period:

- Foothill Boulevard/Euclid Avenue (PM)
- Arrow Highway/2nd Avenue (PM)
- 8th Street/Campus Avenue (PM)

The LOS calculations are attached in Appendix B.

TABLE 7

INTERSECTION LEVELS OF SERVICE – EXISTING CONDITIONS

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay[1]	LOS	V/C[3]	Delay[1]	LOS	V/C[3]
Foothill Boulevard/San Antonio Avenue	Signalized	45.6	D	0.80	34.1	C	0.75
Foothill Boulevard/Euclid Avenue	Signalized	40.5	D	0.79	**55.4**	**E**	0.89
Foothill Boulevard/Campus Avenue	Signalized	44.9	D	0.88	43.0	D	0.79
Foothill Boulevard/Grove Avenue	Signalized	12.4	B	0.52	12.0	B	0.68
Arrow Highway/San Antonio Avenue	Signalized	15.0	B	0.61	13.6	B	0.55
Arrow Highway/Euclid Avenue	Signalized	13.9	B	0.54	15.2	B	0.55
Arrow Highway/2nd Avenue	Signalized	16.9	B	0.49	**64.4**	**E**	0.43
Arrow Highway/Campus Avenue	Signalized	18.1	B	0.46	24.8	C	0.68
Arrow Highway/Grove Avenue	Signalized	12.7	B	0.53	14.0	B	0.58
9th Street/San Antonio Avenue	Signalized	9.5	A	0.43	9.5	A	0.42
9th Street/Euclid Avenue	Signalized	12.2	B	0.67	10.8	B	0.44
9th Street/Grove Avenue	Signalized	8.8	A	0.32	8.9	A	0.37
8th Street/San Antonio Avenue	Signalized	13.0	B	0.44	13.8	B	0.52
8th Street/Euclid Avenue	Signalized	9.7	A	0.51	12.6	B	0.59
8th Street/2nd Avenue	AWSC	12.9	B		15.7	C	
8th Street/Campus Avenue	AWSC	26.1	D		**102.0**	**F**	
8th Street/Grove Avenue	Signalized	9.4	A	0.40	9.6	A	0.41
7th Street/Euclid Avenue	Signalized	13.4	B	0.62	14.5	B	0.58
7th Street/2nd Avenue/I-10 WB Off-Ramp	AWSC	33.3	D		31.6	D	
10 WB On-Ramp/Euclid Avenue	Free	0.4	A		0.3	A	
10 WB On-Ramp Loop/Euclid Avenue	Free	0.2	A		0.3	A	
10 EB Ramps/Euclid Avenue	Signalized	32.7	C	0.89	42.7	D	0.90

Notes:
1- Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2- CMP intersection
3- V/C = Volume to Capacity ratio. Note – V/C is not calculated for unsignalized intersections.
Source: Fehr & Peers, 2009

EXISTING ROADWAY SEGMENT CONDITIONS

As shown in Table 8, all roadway segments operate at an acceptable daily level of service.

TABLE 8

ROADWAY SEGMENT LEVELS OF SERVICE – EXISTING CONDITIONS

Segment	LOS D Threshold	ADT	Exceeds LOS D?
Euclid Ave (Major Arterial)			
7th Street to 8th Street	52,800	38,264	No
8th Street to Arrow Highway	52,800	38,366	No
Campus Ave (Secondary Arterial)			
7th Street to 8th Street	26,400	8,338	No
8th Street to Arrow Highway	26,400	10,187	No
Arrow Highway to Foothill Blvd	26,400	13,609	No
8th Street (Collector)			
San Antonio Ave to Euclid Ave	13,200	7,991	No
Euclid Ave to Campus Ave	13,200	6,830	No
Arrow Route/Arrow Highway (Secondary Arterial)			
San Antonio Ave to Euclid Ave	26,400	10,271	No

Source: Fehr & Peers, 2009

3. EXISTING PLUS PROJECT IMPACT ASSESSMENT

This section documents the project impacts compared to existing conditions.

PROJECT TRAFFIC

Project trip generation, distribution, and assignment were described in Chapter 1 – Analysis Parameters. Project traffic was developed using the Upland TDF model and the difference method was applied to identify net changes in trips between existing and project traffic.

TRAFFIC VOLUMES

The Existing plus Project volumes for the study intersections are shown on Figure 9.

INTERSECTION OPERATIONS & PROJECT IMPACTS

Table 9 documents the LOS results for the Existing plus Project scenario. LOS results are attached in Appendix C.

Table 10 compares the V/C ratios for the No Project and With Project scenarios to identify significant impacts at signalized intersections. Table 11 documents whether unsignalized intersections meet significant impact criteria. As shown in these tables, all intersections are operating at LOS D or better in both scenarios.

Intersection and Roadway Segment Impacts

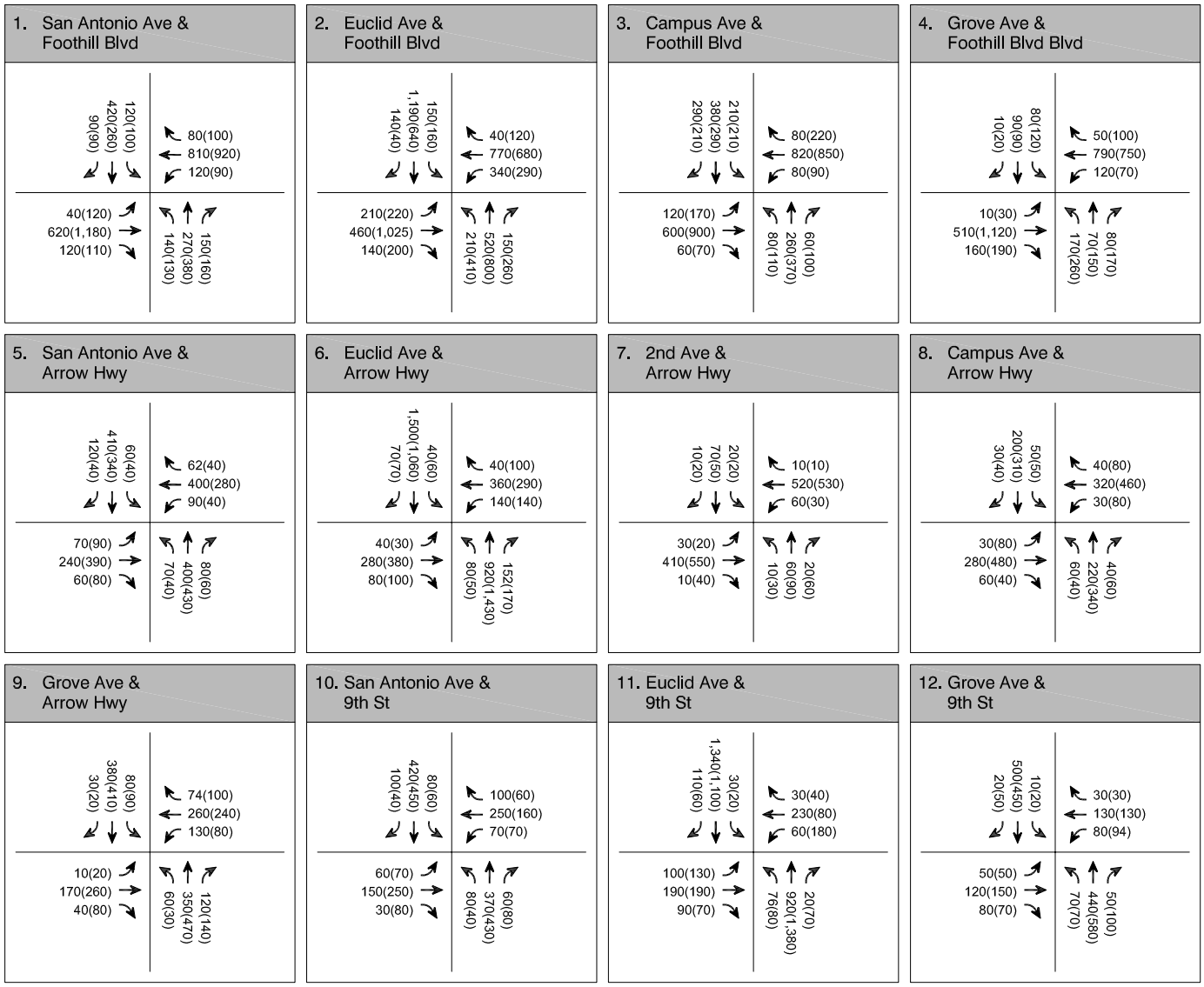
As identified in Chapter 1, the proposed project would result in a significant impact if:

1. The project will disrupt existing traffic operations. Traffic operations were assessed using both quantitative (Level of Service (LOS)) and qualitative criteria. A disruption of traffic operations is defined as any of the following, and is summarized in Tables 5 and 6:

    a. The addition of project traffic causes a roadway segment operating at LOS D or better to degrade to LOS E or F with the introduction of project trips (City of Upland threshold).
    b. The addition of project traffic causes a signalized intersection to operate at LOS D or worse with an increase in delay above the following thresholds:
        - For an LOS D intersection, an increase in delay greater than 5 seconds
        - For an LOS E intersection, an increase in delay greater than 2 seconds
        - For an LOS F intersection, an increase in delay greater than 1 second

        (City of Upland threshold).
    c. The project adds 10 or more trips at an unsignalized intersection, causing the intersection to operate at LOS E or F, if the intersection meets signal warrants (standard engineering practice).
    d. The addition of 10 or more project trips at an unsignalized intersection already operating at LOS E or F, if the intersection meets signal warrants (standard engineering practice).

2. For CMP intersections, a V/C ratio of 1.0 or greater is considered to be LOS F, regardless of intersection delay LOS. The significance criteria identified in the San Bernardino CMP guidelines and consistent with standard traffic engineering practice for intersection operations were summarized previously in Tables 5 and 6.



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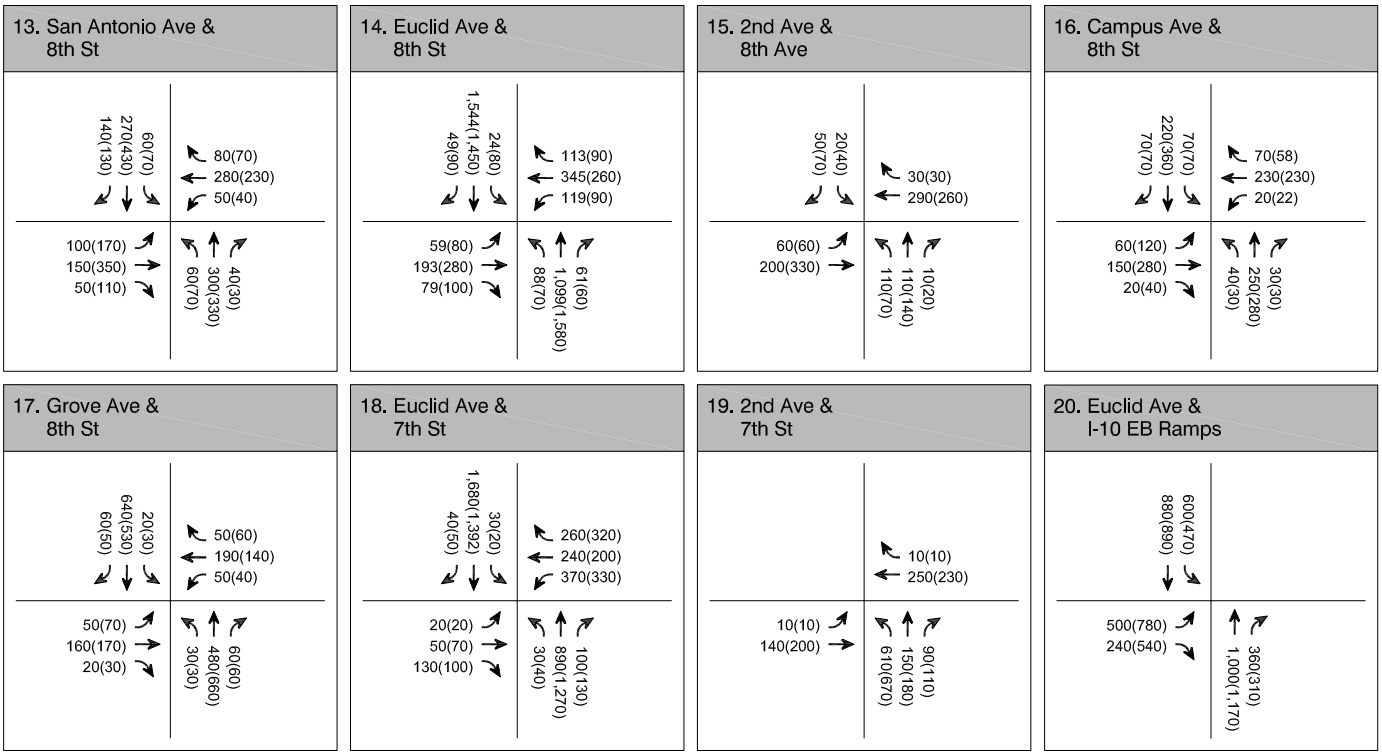
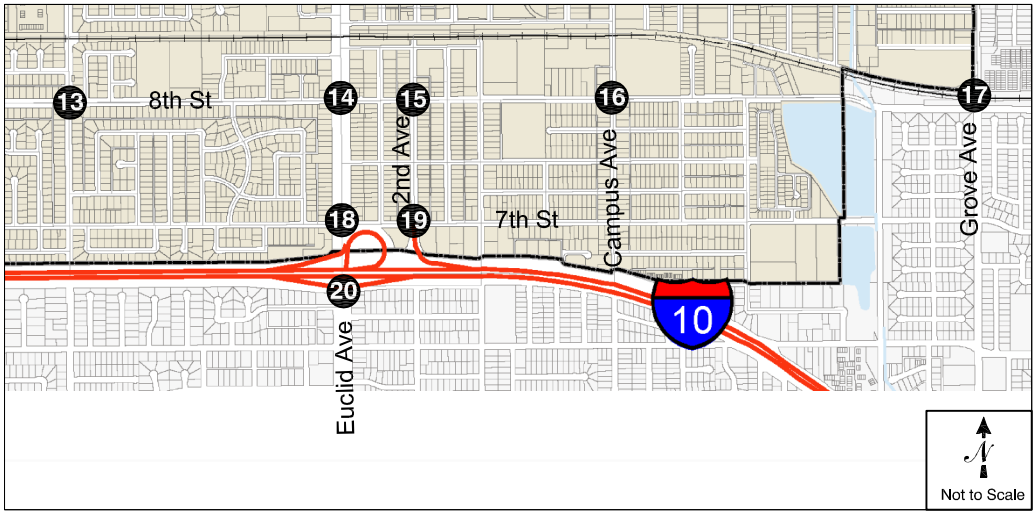
EXISTING PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 9



LEGEND

- Project Site
- Analyzed Intersection
- X(X) AM(PM) Peak Hour Traffic Volumes
- Turn Lane
- Traffic Signal
- Stop Sign
- Railroad



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EXISTING PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 9

As shown in Table 9, all roadway segments operate acceptably with the addition of project traffic. Impacts along roadway segments are therefore ***less than significant.***

TABLE 9

ASSESSMENT OF DOWNTOWN ROADWAY VOLUMES - EXISTING

Segment	LOS D Threshold	Existing		DTSP Land Use		
		ADT	Exceeds LOS D?	ADT	ΔADT	Exceeds LOS D?
Euclid Avenue						
7th to 8th Street	52,800	38,264	No	38,720	456	No
8th Street to Arrow Highway	52,800	38,366	No	39,620	1,254	No
Campus Avenue						
7th Street to 8th Street	26,400	8,338	No	8,970	632	No
8th Street to Arrow Highway	26,400	10,187	No	11,010	823	No
Arrow Highway to Foothill Blvd.	26,400	13,609	No	13,830	221	No
8th Street						
San Antonio Ave to Euclid Ave	13,200	7,991	No	8490	499	No
Euclid Ave to Campus Ave	13,200	6,830	No	7,730	900	No
Arrow Route/Arrow Highway						
San Antonio Ave to Euclid Ave	26,400	10,271	No	10,480	209	No

Source: Fehr & Peers, 2009

As shown in Tables 10-12, the project impact the intersection of 8th Street/Campus Avenue.

TABLE 10

INTERSECTION LEVELS OF SERVICE – EXISTING PLUS PROJECT

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay[1]	LOS	V/C[3]	Delay[1]	LOS	V/C[3]
Foothill Boulevard/San Antonio Avenue	Signalized	48.1	D	0.82	34.7	C	0.76
Foothill Boulevard/Euclid Avenue	Signalized	40.8	D	0.80	52.2	D	0.84
Foothill Boulevard/Campus Avenue	Signalized	45.6	D	0.88	44.1	D	0.79
Foothill Boulevard/Grove Avenue	Signalized	12.4	B	0.53	12.0	B	0.69
Arrow Highway/San Antonio Avenue	Signalized	15.0	B	0.60	13.9	B	0.56
Arrow Highway/Euclid Avenue	Signalized	14.1	B	0.55	15.4	B	0.55
Arrow Highway/2nd Avenue	Signalized	16.9	B	0.49	64.5	E	0.43
Arrow Highway/Campus Avenue	Signalized	18.1	B	0.46	24.5	C	0.68
Arrow Highway/Grove Avenue	Signalized	12.7	B	0.54	14.1	B	0.58
9th Street/San Antonio Avenue	Signalized	9.5	A	0.43	9.5	A	0.42
9th Street/Euclid Avenue	Signalized	12.8	B	0.44	11.0	B	0.45
9th Street/Grove Avenue	Signalized	8.8	A	0.32	8.9	A	0.37
8th Street/San Antonio Avenue	Signalized	12.6	B	0.44	13.8	B	0.52
8th Street/Euclid Avenue	Signalized	11.1	B	0.52	12.8	B	0.60
8th Street/2nd Avenue	AWSC	14.9	B		15.7	C	
8th Street/Campus Avenue	AWSC	12.1	D		**132.2**	**F**	
8th Street/Grove Avenue	Signalized	9.5	A	0.40	9.6	A	0.41
7th Street/Euclid Avenue	Signalized	15.4	B	0.63	13.2	B	0.45
7th Street/2nd Avenue/I-10 WB Off-Ramp	AWSC	**35.5**	**E**		32.5	D	
10 WB On-Ramp/Euclid Avenue	Free	0.4	A		0.3	A	
10 WB On-Ramp Loop/Euclid Avenue	Free	0.2	A		0.3	A	0.41
10 EB Ramps/Euclid Avenue	Signalized	33.5	C	0.90	43.3	D	0.90

Notes:
1- Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2- CMP intersection
3- V/C = Volume to Capacity ratio. Note – V/C is not calculated for unsignalized intersections.
Source: Fehr & Peers, 2009

TABLE 11

SIGNALIZED INTERSECTION IMPACTS – EXISTING PLUS PROJECT

Intersection	AM Peak Hour				PM Peak Hour			
	No Project	With Project	ΔDelay	Impact?	No Project	With Project	ΔDelay	Impact
Foothill Boulevard/San Antonio Avenue	45.6 (D)	48.1 (D)	2.5	No	34.1 (C)	34.7 (C)	0.6	No
Foothill Boulevard/Euclid Avenue	40.5 (D)	40.8 (D)	0.3	No	55.4 (E)	52.2 (D)	-2.8	No
Foothill Boulevard/Campus Avenue	44.9 (D)	45.6 (D)	0.7	No	43.0 (D)	44.1 (D)	1.1	No
Foothill Boulevard/Grove Avenue	12.4 (B)	12.4 (B)	0.0	No	12.0 (B)	12.0 (B)	0.0	No
Arrow Highway/San Antonio Avenue	15.0 (B)	15.0 (B)	0.0	No	13.6 (B)	13.9 (B)	0.3	No
Arrow Highway/Euclid Avenue	13.9 (B)	14.1 (B)	0.2	No	15.2 (B)	15.4 (B)	0.2	No
Arrow Highway/Second Avenue	16.9 (B)	16.9 (B)	0.0	No	64.4 (E)	64.5 (E)	0.1	No
Arrow Highway/Campus Avenue	18.1 (B)	18.1 (B)	0.0	No	24.8 (C)	24.5 (C)	-0.03	No
Arrow Highway/Grove Avenue	12.7 (B)	12.7 (B)	0.0	No	14.0 (B)	14.1 (B)	0.01	No
9th Street/San Antonio Avenue	9.5 (A)	9.5 (A)	0.0	No	9.5 (A)	9.5 (A)	0.0	No
9th Street/Euclid Avenue	12.2 (B)	12.8 (B)	0.6	No	10.8 (B)	11.0 (B)	0.2	No
9th Street/Grove Avenue	8.8 (A)	8.8 (A)	0.0	No	8.9 (A)	8.9 (A)	0.0	No
8th Street/San Antonio Avenue	13.0 (B)	12.6 (B)	-0.4	No	13.8 (B)	13.8 (B)	0.0	No
8th Street/Euclid Avenue	9.7 (A)	11.1 (B)	1.4	No	12.6 (B)	12.8 (B)	0.2	No
8th Street/Grove Avenue	9.4 (A)	9.5 (A)	0.1	No	9.6 (A)	9.6 (A)	0.0	No
7th Street/Euclid Avenue	13.4 (B)	15.4 (B)	2.0	No	14.5 (B)	13.2 (B)	-1.3	No
10EB Ramps/Euclid Avenue	32.7 (C)	33.5 (C)	0.8	No	42.7 (D)	43.3 (D)	0.6	No

Notes:
1- Delay for signalized intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
Source: Fehr & Peers, 2010

TABLE 12

UNSIGNALIZED INTERSECTION IMPACTS – EXISTING PLUS PROJECT

Intersection	Control	AM Peak Hour			PM Peak Hour		
		LOS E or F?	>10 Trips	Meets Signal Warrants	LOS E or F?	>10 Trips	Meets Signal Warrants
8th Street/Campus Avenue	AWSC	No			**Yes**	**Yes**	**Yes**
7th Street/2nd Avenue/10WB Off Ramp	AWSC	Yes	Yes	No	No		

Source: Fehr & Peers, 2010

MITIGATION MEASURES

With the addition of project traffic, we have identified a project impact at the intersection of 8th Street/Campus Avenue (PM).

The intersection of 8th Street/Campus Avenue currently operates at an unacceptable LOS F during the PM peak hour. The addition of project traffic causes the intersections operations to further degrade. However, much of the delay occurs because all vehicles must come to a complete stop at the intersection, since it is all-way stop controlled. With the installation of a traffic signal at this location, the intersection will operate at an acceptable LOS B. The City would be responsible for designing and installing a traffic signal at this locatoin. The impact after mitigation is therefore *less than significant*.

4. CUMULATIVE (YEAR 2030) CONDITIONS

This section documents the project impacts compared to cumulative conditions.

CUMULATIVE NO PROJECT TRAFFIC VOLUMES

Cumulative (Year 2030) baseline traffic conditions were developed using the following approach:

- A growth rate of 1.05% per year was applied to existing project traffic to identify background growth. The growth rate was developed by comparing volumes from the existing and future SCAG model on Upland roadways.

- A list of approved and pending projects was obtained from the City. Three projects were located within the Downtown Sphere of Influence. Trip generation, distribution, and assignment was developed for each project and applied to cumulative traffic volumes. Because each of the projects is relatively small, there was minimal traffic added to the study facilities from the development of these projects.

Figure 10 identifies cumulative intersection volumes.

PROJECT TRAFFIC

Project trip generation, distribution, and assignment were described in Chapter 1 – Analysis Parameters. Project traffic was developed using the Upland TDF model and the difference method was applied to identify net changes in trips between existing and project traffic.

Figure 11 identifies cumulative plus project intersection volumes.

INTERSECTION OPERATIONS & PROJECT IMPACTS

Table 13 documents the LOS results roadway segments under Cumulative and Cumulative plus Project scenarios. Table 14 identifies intersection conditions under Cumulative No Project and Table 15 identifies intersection conditions under Cumulative Plus Project. Table 16 identifies intersection conditions under each scenario and compares delay for No Project and With Project scenarios to identify any cumulatively significant impacts at signalized intersections. Table 17 documents whether impacts at unsignalized intersections are cumulatively significant.

Intersection Impacts

As identified in Chapter 1, the proposed project would result in a significant impact if:

1. The project will disrupt existing traffic operations. Traffic operations were assessed using both quantitative (Level of Service (LOS)) and qualitative criteria. A disruption of traffic operations is defined as any of the following, and is summarized in Tables 5 and 6:

    a. The addition of project traffic causes a roadway segment operating at LOS D or better to degrade to LOS E or F with the introduction of project trips (City of Upland threshold).
    b. The addition of project traffic causes a signalized intersection to operate at LOS D or worse with an increase in delay above the following thresholds:

- For an LOS D intersection, an increase in delay greater than 5 seconds
- For an LOS E intersection, an increase in delay greater than 2 seconds
- For an LOS F intersection, an increase in delay greater than 1 second

(City of Upland threshold).

c. The project adds 10 or more trips at an unsignalized intersection, causing the intersection to operate at LOS E or F, if the intersection meets signal warrants (standard engineering practice).

d. The addition of 10 or more project trips at an unsignalized intersection already operating at LOS E or F, if the intersection meets signal warrants (standard engineering practice).

2. For CMP intersections, a V/C ratio of 1.0 or greater is considered to be LOS F, regardless of intersection delay LOS. The significance criteria identified in the San Bernardino CMP guidelines and consistent with standard traffic engineering practice for intersection operations were summarized previously in Tables 5 and 6.

As shown in Tables 16 and 17, the project has cumulative impacts at the following intersection locations:

- Foothill Boulevard/San Antonio Boulevard (AM/PM)
- Foothill Boulevard/Euclid Boulevard (PM)
- Arrow Highway/Campus Avenue (PM)
- 10EB Ramps/Euclid Avenue (PM)
- 8th Street/Second Avenue (PM)
- 8th Street/Campus Avenue (AM/PM)
- 7th Street/2nd Avenue/I-10 Off Ramp (AM/PM)

TABLE 13

ASSESSMENT OF DOWNTOWN ROADWAY VOLUMES – CUMULATIVE CONDITIONS

Segment	LOS D Threshold	Cumulative		Cumulative with DTSP		
		ADT	Exceeds LOS D?	ADT	ΔADT	Exceeds LOS D?
Euclid Avenue						
7th to 8th Street	52,800	48,148	No	48,604	456	No
8th Street to Arrow Highway	52,800	48,276	No	49,530	1,254	No
Campus Avenue						
7th Street to 8th Street	26,400	10,492	No	11,124	632	No
8th Street to Arrow Highway	26,400	12,818	No	13,641	823	No
Arrow Highway to Foothill Blvd.	26,400	17,124	No	17,345	221	No
8th Street						
San Antonio Ave to Euclid Ave	13,200	7,990	No	8,489	499	No
Euclid Ave to Campus Ave	13,200	8,594	No	9,494	900	No
Arrow Route/Arrow Highway						
San Antonio Ave to Euclid Ave	26,400	12,924	No	13,133	209	No

Source: Fehr & Peers, 2009

TABLE 14

INTERSECTION LEVELS OF SERVICE – CUMULATIVE NO PROJECT

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay[1]	LOS	V/C[3]	Delay[1]	LOS	V/C[3]
Foothill Boulevard/San Antonio Avenue	Signalized	**76.5**	**E**	**1.02**	**142.7**	**F**	**1.22**
Foothill Boulevard/Euclid Avenue	Signalized	**73.2**	**E**	**1.00**	**215.9**	**F**	**1.48**
Foothill Boulevard/Campus Avenue	Signalized	**80.6**	**F**	**1.02**	**186.6**	**F**	**1.31**
Foothill Boulevard/Grove Avenue	Signalized	15.6	B	0.66	**75.1**	**E**	**1.11**
Arrow Highway/San Antonio Avenue	Signalized	19.0	B	0.86	20.1	C	0.87
Arrow Highway/Euclid Avenue	Signalized	16.0	B	0.81	35.3	D	0.88
Arrow Highway/2nd Avenue	Signalized	41.1	D	0.62	**261.5**	**F**	**0.71**
Arrow Highway/Campus Avenue	Signalized	32.3	C	0.60	**85.0**	**F**	**1.34**
Arrow Highway/Grove Avenue	Signalized	15.1	B	0.68	36.4	D	0.94
9th Street/San Antonio Avenue	Signalized	10.8	B	0.55	13.2	B	0.69
9th Street/Euclid Avenue	Signalized	12.2	B	0.63	17.0	B	0.62
9th Street/Grove Avenue	Signalized	9.4	A	0.41	10.9	B	0.61
8th Street/San Antonio Avenue	Signalized	14.7	B	0.60	23.9	C	0.91
8th Street/Euclid Avenue	Signalized	15.3	B	0.76	30.0	C	0.95
8th Street/2nd Avenue	AWSC	21.1	C		**118.0**	**F**	
8th Street/Campus Avenue	AWSC	**104.8**	**F**		**383.3**	**F**	
8th Street/Grove Avenue	Signalized	10.4	B	0.50	13.9	B	0.67
7th Street/Euclid Avenue	Signalized	19.8	B	0.91	30.1	C	0.92
7th Street/2nd Avenue/I-10 WB Off-Ramp	AWSC	**95.5**	**F**		**213.8**	**F**	
10 EB Ramps/Euclid Avenue	Signalized	**62.9**	**E**	**1.13**	**204.1**	**F**	**1.56**

Notes:
1- Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2- CMP intersection
3- V/C = Volume to Capacity ratio. Note – V/C is not calculated for unsignalized intersections.
Source: Fehr & Peers, 2009

TABLE 15

INTERSECTION LEVELS OF SERVICE – CUMULATIVE PLUS PROJECT

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay[1]	LOS	V/C[3]	Delay[1]	LOS	V/C[3]
Foothill Boulevard/San Antonio Avenue	Signalized	**80.6**	**F**	**1.03**	**144.6**	**F**	**1.22**
Foothill Boulevard/Euclid Avenue	Signalized	**73.3**	**E**	**1.00**	**218.4**	**F**	**1.49**
Foothill Boulevard/Campus Avenue	Signalized	**81.4**	**F**	**1.09**	**170.6**	**F**	**1.32**
Foothill Boulevard/Grove Avenue	Signalized	15.7	B	0.67	**75.1**	**E**	**1.11**
Arrow Highway/San Antonio Avenue	Signalized	19.4	B	0.85	21.4	C	0.89
Arrow Highway/Euclid Avenue	Signalized	18.6	B	0.82	35.0	D	0.88
Arrow Highway/2nd Avenue	Signalized	41.2	D	0.62	**262.1**	**F**	**0.71**
Arrow Highway/Campus Avenue	Signalized	32.6	C	0.60	**92.5**	**F**	**1.38**
Arrow Highway/Grove Avenue	Signalized	15.1	B	0.68	37.4	D	0.95
9th Street/San Antonio Avenue	Signalized	10.8	B	0.55	13.4	B	0.68
9th Street/Euclid Avenue	Signalized	12.3	B	0.63	17.7	B	0.63
9th Street/Grove Avenue	Signalized	9.4	A	0.41	10.9	B	0.62
8th Street/San Antonio Avenue	Signalized	14.8	B	0.61	24.6	C	0.94
8th Street/Euclid Avenue	Signalized	15.5	B	0.78	29.8	C	0.96
8th Street/2nd Avenue	AWSC	27.6	D		**115.9**	**F**	
8th Street/Campus Avenue	AWSC	**110.2**	**F**		**423.3**	**F**	
8th Street/Grove Avenue	Signalized	10.5	B	0.51	14.0	B	0.66
7th Street/Euclid Avenue	Signalized	20.3	B	0.91	32.5	C	0.94
7th Street/2nd Avenue/I-10 WB Off-Ramp	AWSC	**101.0**	**F**		**216.8**	**F**	
10 EB Ramps/Euclid Avenue	Signalized	**63.9**	**E**	**1.13**	**205.4**	**F**	**1.56**

Notes:
1- Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2- CMP intersection
3- V/C = Volume to Capacity ratio. Note – V/C is not calculated for unsignalized intersections.
Source: Fehr & Peers, 2009

TABLE 16

SIGNALIZED INTERSECTION IMPACTS - CUMULATIVE

Intersection	AM Peak Hour				PM Peak Hour			
	No Project	With Project	∆Delay	Impact?	No Project	With Project	∆Delay	Impact
Foothill Boulevard/San Antonio Avenue	**76.5 (E)**	**80.6 (F)**	**3.9**	**Yes**	**142.7 (F)**	**144.6 (F)**	**1.9**	**Yes**
Foothill Boulevard/Euclid Avenue	73.2 (E)	73.3 (E)	1.1	No	**215.9 (F)**	**218.4 (F)**	**2.5**	**Yes**
Foothill Boulevard/Campus Avenue	80.6 (F)	81.4 (F)	0.8	No	186.6 (F)	170.6 (F)	-16.0	No
Foothill Boulevard/Grove Avenue	15.6 (B)	15.7 (B)	0.1	No	75.1 (E)	75.1 (E)	0.0	No
Arrow Highway/San Antonio Avenue	19.0 (B)	19.4 (B)	0.4	No	20.1 (C)	21.4 (C)	1.3	No
Arrow Highway/Euclid Avenue	16.0 (B)	18.6 (B)	2.6	No	35.3 (D)	35.0 (D)	-0.3	No
Arrow Highway/Second Avenue	41.1 (D)	41.2 (D)	0.1	No	261.5 (F)	262.1 (F)	0.6	No
Arrow Highway/Campus Avenue	32.3 (C)	32.6 (C)	0.3	No	**85.0 (F)**	**92.5 (F)**	**7.5**	**Yes**
Arrow Highway/Grove Avenue	15.1 (B)	15.1 (B)	0.0	No	36.4 (D)	37.4 (D)	1.0	No
9th Street/San Antonio Avenue	10.8 (B)	10.8 (B)	0.0	No	13.2 (B)	13.4 (B)	0.2	No
9th Street/Euclid Avenue	12.2 (B)	12.3 (B)	0.1	No	17.0 (B)	17.7 (B)	0.7	No
9th Street/Grove Avenue	9.4 (A)	9.4 (A)	0.0	No	10.9 (B)	10.9 (B)	0.0	No
8th Street/San Antonio Avenue	14.7 (B)	14.8 (B)	0.1	No	23.9 (C)	24.6 (C)	0.7	No
8th Street/Euclid Avenue	15.3 (B)	15.5 (B)	0.2	No	30.0 (C)	29.8 (C)	-0.2	No
8th Street/Grove Avenue	10.4 (B)	10.5 (B)	0.1	No	13.9 (B)	14.0 (B)	0.1	No
7th Street/Euclid Avenue	19.8 (B)	20.3 (B)	0.5	No	30.1 (C)	32.5 (C)	2.4	No
10EB Ramps/Euclid Avenue	62.9 (E)	63.9 (E)	1.0	No	**204.1 (F)**	**205.4 (F)**	**1.3**	**Yes**

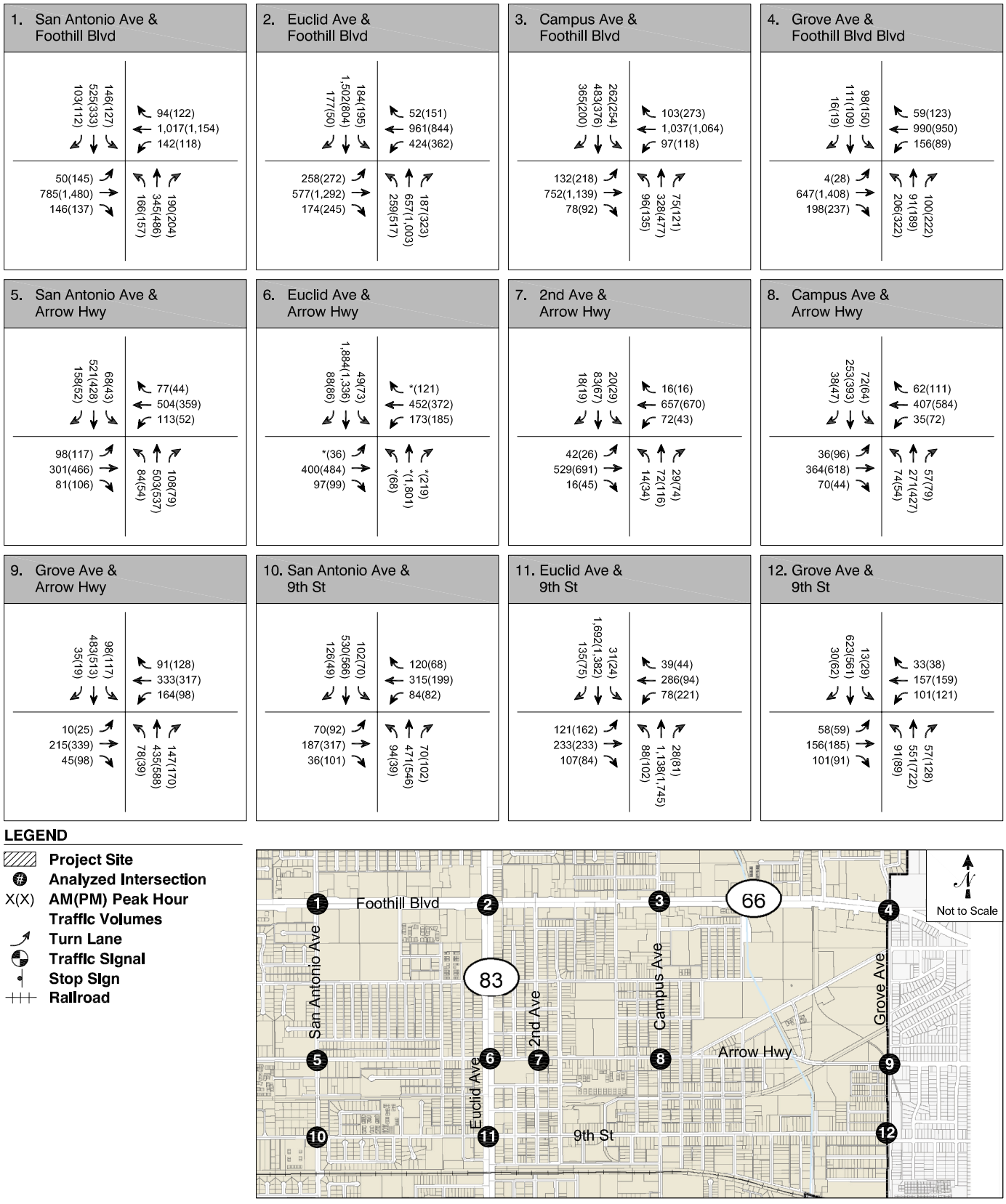
Notes:
1- Delay for signalized intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
Source: Fehr & Peers, 2010

TABLE 17

UNSIGNALIZED INTERSECTION IMPACTS - CUMULATIVE

Intersection	Control	AM Peak Hour			PM Peak Hour		
		LOS E or F?	>10 Trips	Meets Signal Warrants	LOS E or F?	>10 Trips	Meets Signal Warrants
8th Street/2nd Avenue	AWSC	No			**Yes**	**Yes**	**Yes**
8th Street/Campus Avenue	AWSC	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7th Street/2nd Avenue/10WB Off Ramp	AWSC	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Source: Fehr & Peers, 2010



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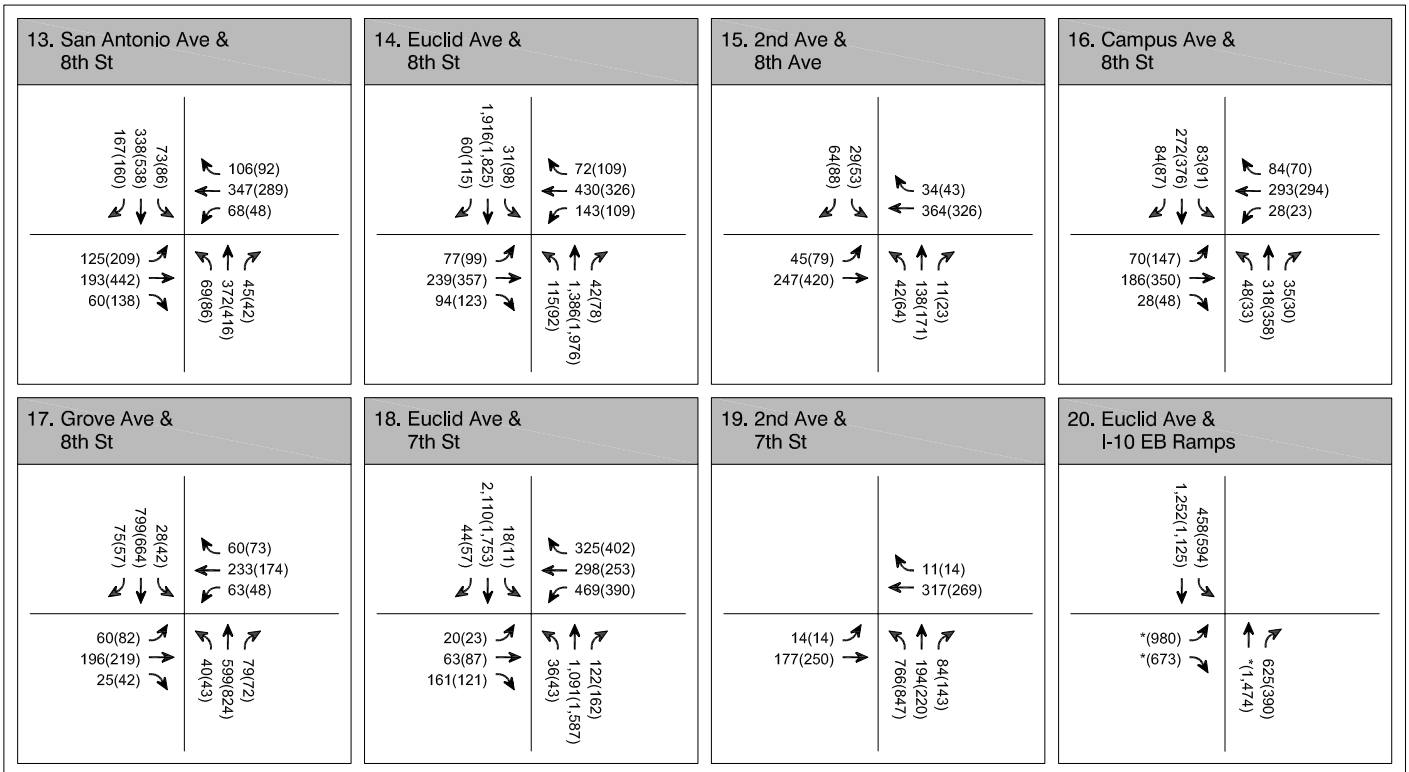
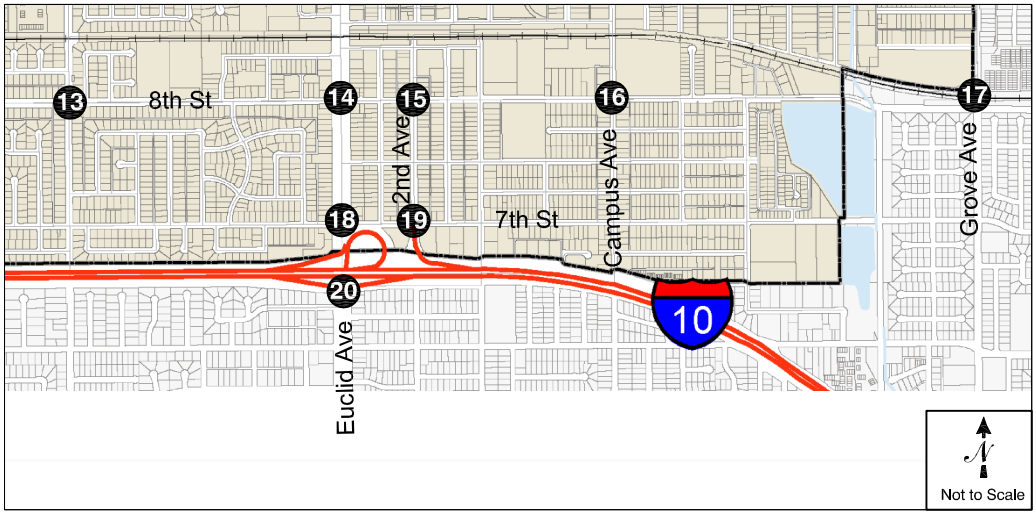
CUMULATIVE BASE PEAK HOUR TRAFFIC VOLUMES

FIGURE 10



LEGEND

- Project Site
- # Analyzed Intersection
- X(X) AM(PM) Peak Hour Traffic Volumes
- Turn Lane
- Traffic Signal
- Stop Sign
- Railroad



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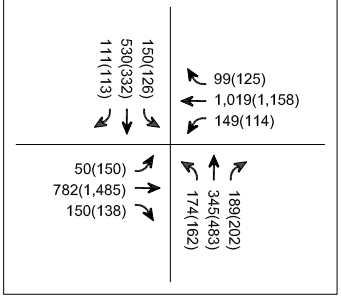
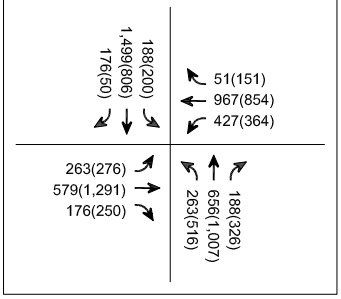
CUMULATIVE BASE PEAK HOUR TRAFFIC VOLUMES

FIGURE 10

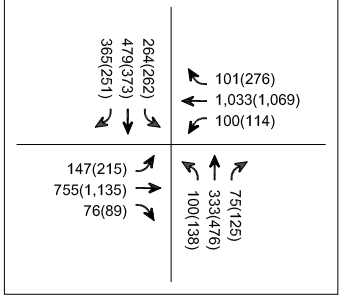
1. San Antonio Ave & Foothill Blvd



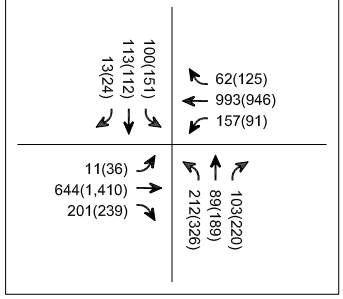
2. Euclid Ave & Foothill Blvd



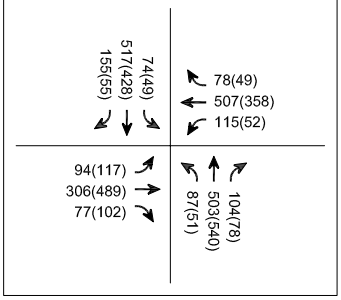
3. Campus Ave & Foothill Blvd



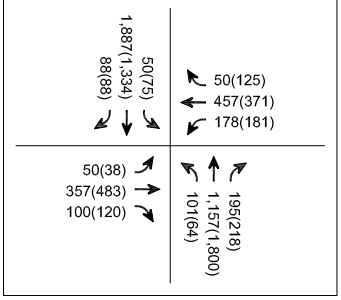
4. Grove Ave & Foothill Blvd Blvd



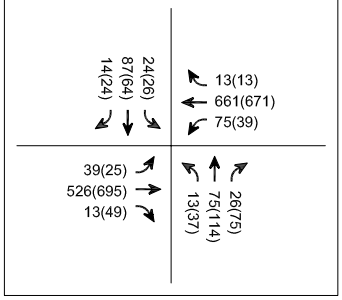
5. San Antonio Ave & Arrow Hwy



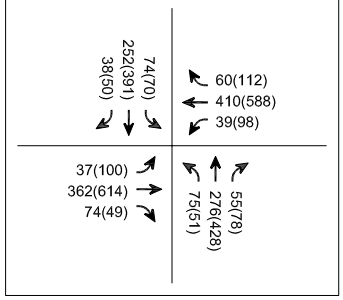
6. Euclid Ave & Arrow Hwy



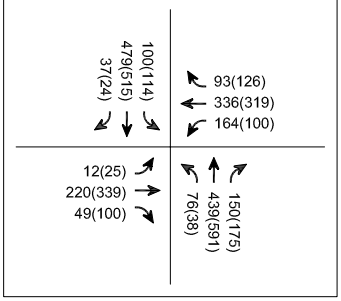
7. 2nd Ave & Arrow Hwy



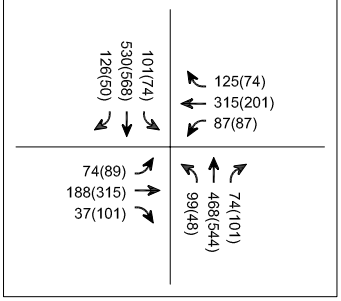
8. Campus Ave & Arrow Hwy



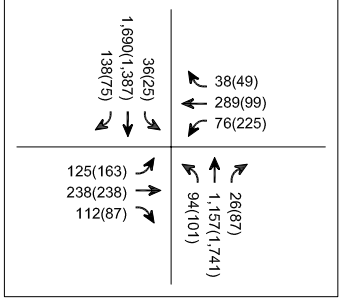
9. Grove Ave & Arrow Hwy



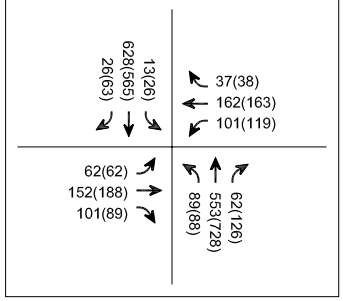
10. San Antonio Ave & 9th St



11. Euclid Ave & 9th St

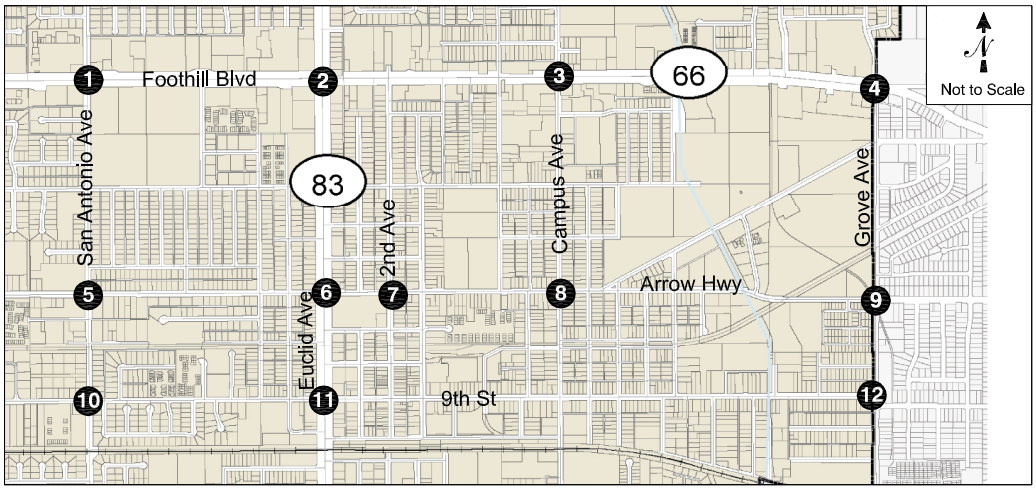


12. Grove Ave & 9th St



LEGEND

- Project Site
- Analyzed Intersection
- X(X) AM(PM) Peak Hour Traffic Volumes
- Turn Lane
- Traffic Signal
- Stop Sign
- Railroad



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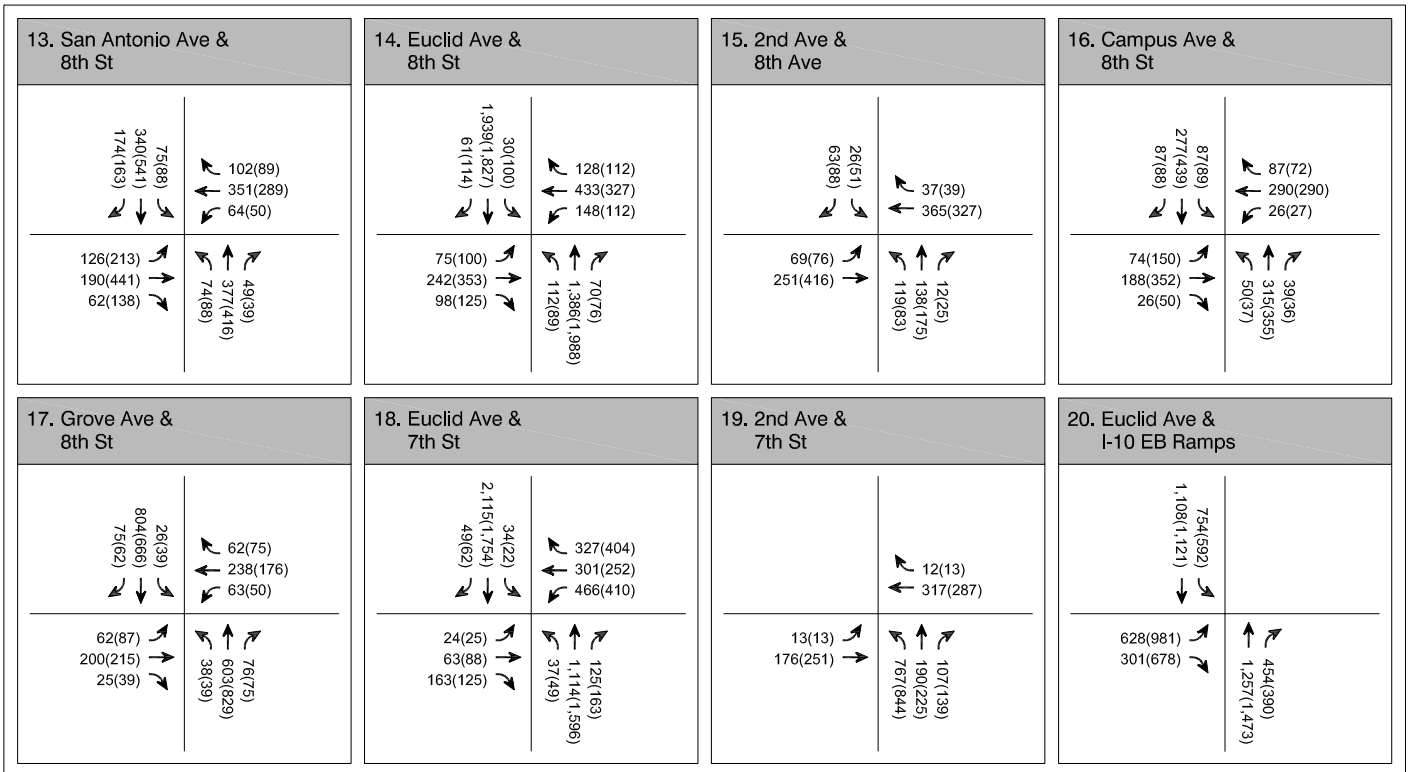
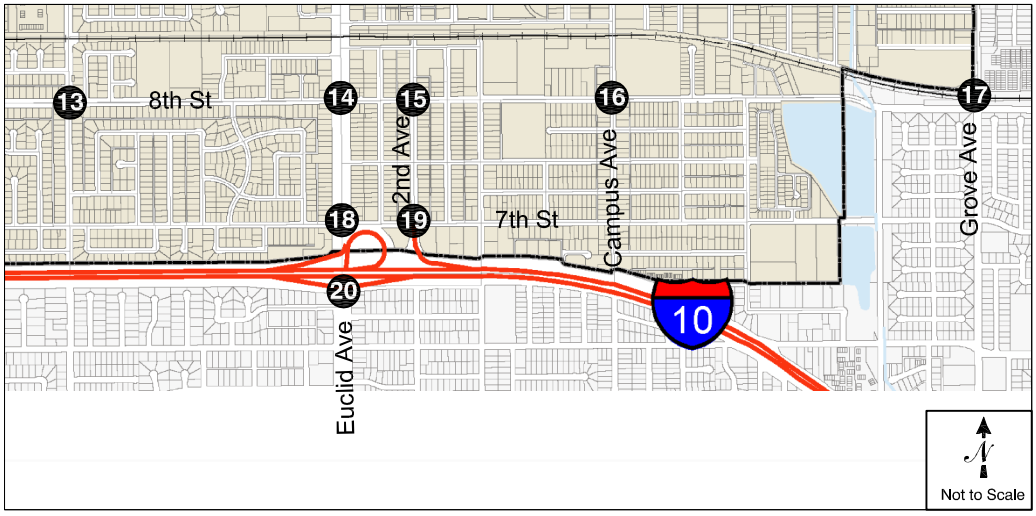
CUMULATIVE PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 11



LEGEND

- Project Site
- # Analyzed Intersection
- X(X) AM(PM) Peak Hour Traffic Volumes
- Turn Lane
- Traffic Signal
- Stop Sign
- Railroad



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Apr 27, 2010 SP
N:\Jobs\Active\IE Jobs\IE09-0020\ACAD\IE09-0020 Base Volumes.dwg

CUMULATIVE PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

FIGURE 11

ASSUMED IMPROVEMENT

The intersection of Arrow Highway/Campus Avenue will operate at an unacceptable LOS F during the PM peak hour in both the No Project and With Project Scenario. Because the project increases delay by more than the allowable amount, the impact is significant. This impact will be addressed through a multi-jurisdictional signal retiming/coordination project that is being implemented by SANBAG. As part of this effort, a number of intersections within Upland and other cities in San Bernardino County are being upgraded with updated traffic signal timings and additional equipment to facilitate signal coordination. From information provided by SANBAG, Arrow Highway is one of the arterials whose signal operations will be upgraded in the future as part of this ongoing program. Additional information regarding this program can be found at this location: http://www.sanbag.ca.gov/planning/subr_traffic-signal.html

As noted by various empirical studies which have considered the benefits of these types of signal retiming programs, implementation of signal retiming and coordination can reduce delay and congestion by upwards of 10 percent as compared to the condition prior to its implementation. We would therefore consider that the implementation of this program will improve operations at this intersection and therefore address this impact. Based on information provided by SANBAG, it is anticipated that this improvement should be completed by the end of 2011. No contribution is required for this project as this program is fully funded through CMAQ and Proposition 1B funds through the TLSP program.

MITIGATION MEASURES

With the addition of project traffic, we have identified cumulative impacts at the following locations requiring mitigation:

- Foothill Boulevard/San Antonio Avenue (AM/PM)
- Foothill Boulevard/Euclid Boulevard (PM)
- 10EB Ramps/Euclid Avenue (PM)
- 8th Street/Second Avenue (PM)
- 8th Street/Campus Avenue (AM/PM)
- 7th Street/2nd Avenue/I-10 Off Ramp (AM/PM)

In each case, the intersection operates at an unacceptable LOS before and after the addition of traffic from the Downtown Specific Plan.

The intersection of Foothill Boulevard/San Antonio Avenue will operate at an unacceptable LOS F during the AM and PM peak hours. Because the project increases delay at an intersection that is already operating at a deficient LOS and delay, the impact is significant. We tested a number of alternative improvements which including dedicated right turn lanes on one or more of the intersection approach. The improvement which provided the highest degree of benefit was an additional east-bound right turn lane The City of Upland would be responsible for the design and construction of this right-turn lane and/or other improvements that can effectuate commensurate benefits. With the implementation of this right-turn lane, the impact would be *less than significant*. .

The intersection of Foothill Boulevard/Euclid Avenue will operate at an unacceptable LOS F during the PM peak hours. Because the project increases delay, the impact is significant. We tested several alternative improvements related to this intersection and determined that the most beneficial improvement would be the

addition of a west-bound right turn lane. The City of Upland would be responsible for the design and construction of this right-turn lane and/or other improvements that can effectuate commensurate benefits. Additionally, right-of-way would need to be acquired from the property at this intersection to accommodate this improvement. With the implementation of this improvement, the impact would be *less than significant.*

The intersection of I-10 EB Ramps/Euclid Avenue will operate at an unacceptable LOS F during the PM peak hours. Because the project increases delay by more than the allowable amount, the impact is significant. To operate acceptably, an additional through lane in the northbound and southbound directions would need to be added. The intersection would also require an additional eastbound left-turn and right-turn lane and southbound left-turn lane. The City of Upland has previously identified improvements at this location through consultation with SANBAG and the City of Ontario. Two regional studies including the Measure I Strategic Plan and the SANBAG Nexus Study have included funding for this reconstruction of the interchange. Measure I refers to the ½ cent sales tax for transportation improvements implemented in San Bernardino County. Additional information regarding the Measure I program can be found here: http://www.sanbag.ca.gov/planning/subr_measure-i.html#twocols. The Nexus Study refers to the regional traffic fee program implemented in San Bernardino County which is documented here: http://www.sanbag.ca.gov/planning/cmp/cmp09NexusStudy.pdf. Participation in the Countywide Nexus program occurs through the payment of traffic fees, which would be the responsibility of individual projects as they are approved within the Downtown Specific Plan area. Based on these considerations, we have determined that with the implementation of this mitigation, the impact is *less than significant*.

The intersection of 8th Street/2nd Avenue will operate at an unacceptable LOS F during the PM peak hour. Because the project increases delay, the impact is significant. To operate acceptably, a signal would need to be installed. The City would be responsible for the implementation of this mitigation measure. After mitigation, this impact is *less than significant.*

The intersection of 8th Street/Campus Avenue currently operates at an unacceptable LOS F during the PM peak hour. The addition of cumulative traffic would cause the intersection to further degrade. The installation of a traffic signal and the widening of the intersection to account for designated left-turn lanes at the eastbound, northbound, and southbound approaches would improve intersection operations to an acceptable level. The City would be responsible for the implementation of this improvement. The impact after mitigation is therefore *less than significant.*

The intersection of 7th Street/2nd Avenue/I-10 Off Ramp will operate at an unacceptable LOS F during the AM and PM peak hours. Because the project increases delay, the impact is significant. To operate acceptably, a signal would need to be installed. The City would be responsible for the implementation of this mitigation measure. With the implementation of this measure, the impact is *less than significant.*

5. TRANSIT SYSTEM - PROJECT IMPACTS

This chapter discusses impacts related to the transit system. Potential impacts could include disruptions to existing transit service, interference with planned transit facilities, conflicts with adopted transit system plans, guidelines, policies, or standards, and creation of demand for public transit above the available capacity.

DISRUPTIONS TO EXISTING TRANSIT SERVICE

Significance Criteria

The following significance criteria were applied to determine if the project is responsible for a disruption of existing transit services or facilities:

> A significant impact occurs if a project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions caused by proposed project driveways on transit streets and impacts to transit stops/shelters; and impacts to transit operations from traffic improvements proposed or resulting from a project.

Project Impact

Currently there are transit lines with stops along Foothill Boulevard, Arrow Highway, Campus Avenue, and Euclid Avenue within the project study area. The project does not interfere with access to any of these routes. This would enhance transit services. The project does not cause any significant impacts along the roadway segments along transit routes. Therefore, the project will not impact or affect existing transit service; the impact is *less than significant.*

INTERFERENCE WITH PLANNED TRANSIT SERVICES

Significance Criteria

The following significance criteria were applied:

> A significant impact occurs if a project interferes with planned transit services or facilities.

Project Impact

The project provides strategies to improve transit service within downtown Upland, with strategies including providing direct bus service to the Metrolink station on A Street and developing a park-and-ride facility near I-210 with a connecting shuttle to Metrolink station. The project would not interfere with either of these strategies, since roadway segments in the vicinity will continue to operate acceptably with project traffic, and additional ridership on Metrolink routes may reduce vehicle trips to and from downtown Upland. Therefore, the impact is *less than significant.*

PROJECT CONFLICTS OR CREATES INCONSISTENCIES WITH ADOPTED TRANSIT SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

The following significance criteria regarding consistency with adopted transit plans, guidelines, policies, or standards were applied:

> A significant impact occurs if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

Project Impact

The City of Upland General Plan has several statements regarding transit in the circulation element. Some examples include:

- Goal 3 – To accommodate alternative modes of transportation to the private automobile in the City, including non-motorized transporatiton (bicycle and pedestrian), public transportation, and recreational trails.
- Strategy 3.1 – Public transportation facilities shall be promoted that: (1) provide a viable alternative to the automobile; (2) satisfy the transportation needs of the commuters, the economically disadvantaged, the aged, the young, and the disabled; and (3) promote service at a reasonable and equitable cost to both the users and the general community.
- Strategy 3.3 – Regional commuter rail service shall be encouraged.
- Strategy 3.4 – Increased inter-community and regional bus service shall be encouraged.

Based on our review of the proposed project, we can conclude that the project does not conflict with these goals and strategies, or others related to transit. The impact is therefore *less than significant* and no mitigation is required.

DEMAND FOR PUBLIC TRANSIT SERVICES ABOVE CAPACITY

Significance Criteria

The following significance criteria were applied:

> A significant impact occurs if the project creates demand for public transit service above the capacity which is provided, or planned.

Project Impact

According to the *2000 United States Decennial Census*, only 2.5% of all commute trips within the City are made by transit. Based on the assumption that this percentage of transit users remains relatively constant, we concluded that an incremental growth in transit trips produced by the project would not generate a demand beyond the capacity already provided. Therefore, this impact is *less than significant* and no mitigation is required.

6. BICYCLE NETWORK - PROJECT IMPACTS

This chapter reviews project related impacts on the bicycle network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to bicycles.

DISRUPTIONS TO EXISTING FACILITIES

Significance Criteria

The following significance criteria were applied:

> A significant impact occurs if a project disrupts existing bicycle facilities.

Project Impact

There is a Class I bicycle trail between C Street and D Street in downtown Upland. Because this facility is off-street, it will not be impacted by any increase in project traffic along adjacent roadways. Additionally, there is a Class II bicycle route along Euclid Avenue. The project traffic added to roadway segments along Euclid Avenue do not cause degradation in Level of Service, and should not affect bikeway operations. Therefore, this impact is *less than significant.*

PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES

Significance Criteria

The following significance criteria were applied to determine if the project conflicts with planned facilities:

> A significant impact occurs if a project interferes with planned bicycle facilities. This includes failure to dedicate right-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Master Plan or to contribute towards construction of planned bicycle facilities along the project frontage.

Project Impact

The 1995 Pedestrian and Bicycle Facilities Master Plan identifies the following planned bicycle facilities:

- Extend Class II/III Euclid Bicycle Route south to city limits and connect northern and southern portions of route between Arrow Highway and Foothill Boulevard
- Extend Class II/III Campus Avenue bicycle route south to city limit and north through city
- Add Class II/III bicycle route along Arrow Highway through city

All roadways denoted in the Pedestrian and Bicycle Facilities Master Plan will continue to operate acceptably with the addition of project traffic. Additionally, access points to these facilities should not change with the development of downtown Upland. Therefore, the impact is *less than significant.*

PROJECT CONFLICTS WITH ADOPTED BICYCLE SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

A significant impact occurs if the project conflicts or creates inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards.

Project Impact

Our review of the City of Upland General Plan indicated two statements related to bicycles including:

- Goal 3 – To accommodate alternative modes of transportation to the private automobile in the City, including non-motorized transportation (bicycle and pedestrian), public transportation and recreational trails.
- Strategy 3.2 – Every effort shall be made to implement the recommendations and policies of the 1995 City Bicycle and Pedestrian Facilities Master Plan.

As previously noted, the project does not interfere with the planned bicycle facilities noted in the Bicycle and Pedestrian Facilities Master Plan. Additionally, the project does not conflict with the above goals and strategies. We therefore concluded that the impact is *less than significant* and no mitigation is required.

7. PEDESTRIAN NETWORK - PROJECT IMPACTS

This chapter reviews project related impacts on the pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians.

DISRUPTIONS TO EXISTING FACILITIES

Significance Criteria

The following significance criteria were applied:

> A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic at locations experiencing pedestrian safety concerns such as an adjacent crosswalk or school, particularly if the added traffic reduces the number of pedestrian acceptable gaps at an unsignalized crossing or causes queues to spillback through pedestrian crossings.

Project Impact

There are currently sidewalks along all roadways in downtown Upland, with the exception of Stowell Street. There are also marked crosswalks or other pedestrian treatments at all intersections. With the addition of project traffic, existing pedestrian facilities will remain intact. Therefore, the project impact is *less than significant* and no mitigation is required.

PROJECT INTERFERES WITH PLANNED PEDESTRIAN FACILITIES

Significance Criteria

The following significance criteria were applied to determine if the project conflicts with planned facilities:

> A significant impact occurs if a project interferes with pedestrian facilities. In existing or planned urbanized areas, main streets or pedestrian districts, this can include impacts to the quality of the walking environment.

Project Impact

The project proposes the addition of sidewalks where they may be missing on one or both sides of the street:

- Stowell Street from Euclid Avenue to Sultana Avenue
- 1st Avenue from 8th Street to Stowell Street (one side)
- 2nd Avenue from Stowell Street to Metrolink tracks (one side)
- 3rd Avenue from 8th Street to Stowell Street (one side)
- Sultana Avenue north of Stowell Street (one side)
- A Street from 3rd Avenue to 4th Avenue and 6th Avenue to Campus Avenue (one side)
- 4th Avenue from A Street to 9th Street (one side)
- 5th Avenue south of 9th Street (one side)
- 6th Avenue north of A Street (one side)

The project also proposes to improve the pavement conditions on existing sidewalks and to add crosswalks as new streets are constructed in downtown Upland. Additionally, the project plans to add a pedestrian overpass connecting the southern Residential Transit District to the Citrus Transit District and Old Town Historic District.

Outside of planned facilities proposed by the project, there are no planned facilities within the project study area. The downtown specific plan buildout does not interfere with any pedestrian improvements or facilities that it proposes; therefore, the impact is *less than significant*.

PROJECT CONFLICTS WITH ADOPTED PEDESTRIAN SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

Project Impact

Our review of the City of Upland General Plan indicated that there are several policy statements relating to pedestrians including:

- Goal 3 – To accommodate alternative modes of transportation to the private automobile in the City, including non-motorized transportation (bicycle and pedestrian), public transportation, and pedestrian trails.
- Strategy 3.2 – Every effort shall be made to implement the recommendations and policies of the 1995 City Bicycle and Pedestrian Facilities Master Plan.
- Strategy 3.5 – All new development shall be required to provide sidewalks, in accordance with the Master Plan of Streets and Highways.
- Strategy 3.6 – Pedestrian connections shall be encouraged between commercial uses and adjacent residential development through the City site planning review process.
- Strategy 3.7 – The special needs of the physically disadvantaged shall be recognized by ensuring that all sidewalks, streets and street crossings, public areas, and related facilities that are normally used by the general public will be accessible to the physically disabled.

The project plans to accommodate pedestrians both by maintaining existing pedestrian facilities and adding improvements and new facilities in compliance with ADA requirements. We would therefore consider the impact to be *less than significant*.

APPENDIX A- EXISTING TRAFFIC COUNTS

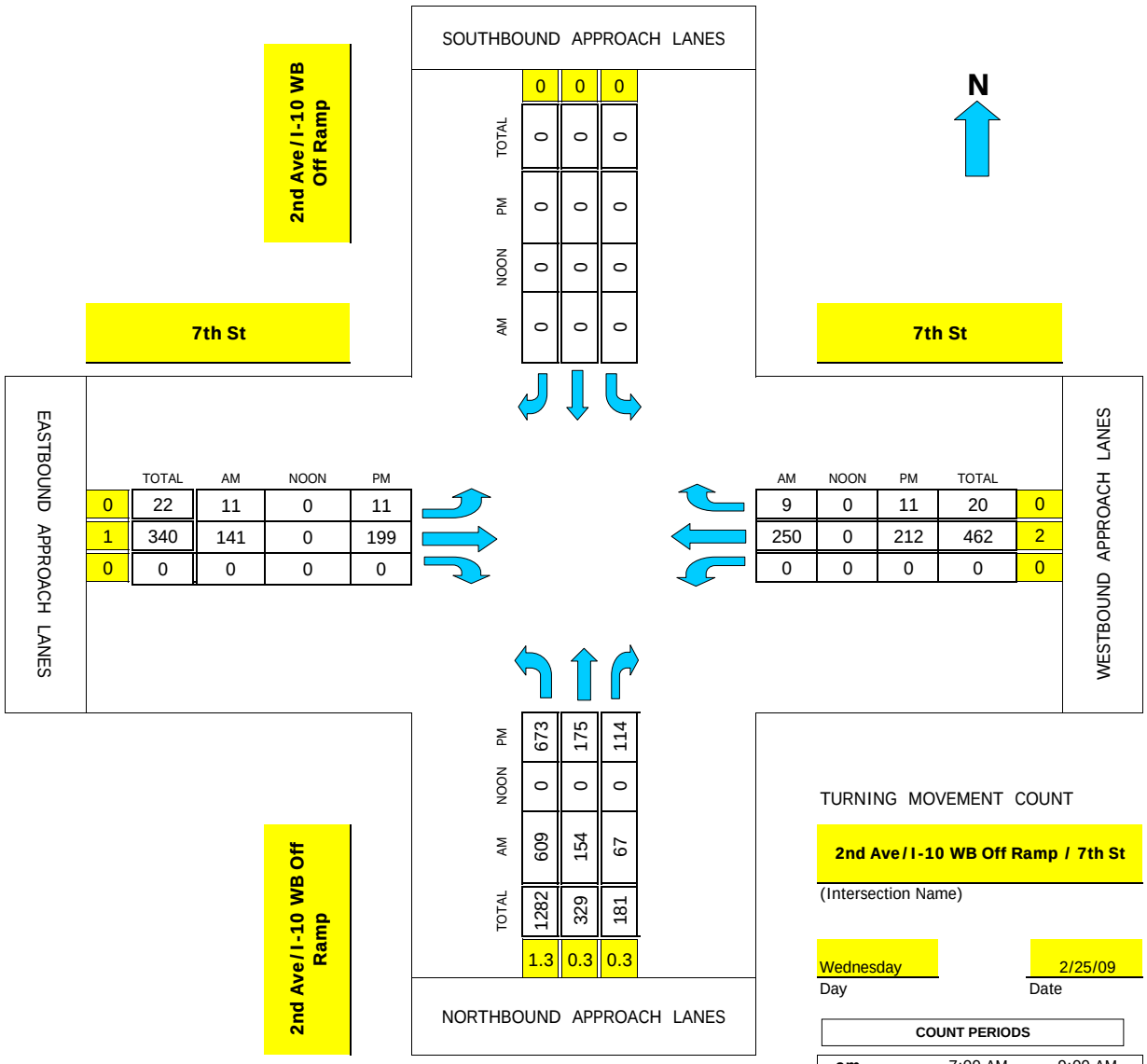
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of 2nd Ave / I-10 WB Off Ramp / 7th St

Project #: 09-6003-029



	TOTAL	AM	NOON	PM	
	0	0	0	0	
TOTAL	0	0	0	0	
PM	0	0	0	0	
NOON	0	0	0	0	
AM	0	0	0	0	

	TOTAL	AM	NOON	PM	
0	22	11	0	11	
1	340	141	0	199	
0	0	0	0	0	

AM	NOON	PM	TOTAL	
9	0	11	20	0
250	0	212	462	2
0	0	0	0	0

	TOTAL	AM	NOON	PM
TOTAL	1282	329	181	
AM	609	154	67	
NOON	0	0	0	
PM	673	175	114	
	1.3	0.3	0.3	

TURNING MOVEMENT COUNT

2nd Ave / I-10 WB Off Ramp / 7th St

(Intersection Name)

Wednesday — Day

2/25/09 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: San Antonio Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPSA9AM
Site Code : 03922441
Start Date : 6/3/2008
Page No : 1

Groups Printed- Total Volume

	San Antonio Avenue Southbound				9th Street Westbound				San Antonio Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	55	12	72	8	36	8	52	15	38	4	57	7	16	4	27	208
07:15 AM	14	99	12	125	7	47	19	73	19	111	11	141	10	26	5	41	380
07:30 AM	25	143	31	199	21	73	46	140	19	138	19	176	28	45	10	83	598
07:45 AM	32	109	36	177	22	75	18	115	16	66	16	98	8	45	8	61	451
Total	76	406	91	573	58	231	91	380	69	353	50	472	53	132	27	212	1637
08:00 AM	10	69	21	100	17	55	12	84	21	58	10	89	10	33	6	49	322
08:15 AM	8	56	18	82	17	44	3	64	7	49	18	74	10	16	6	32	252
08:30 AM	5	58	12	75	18	41	4	63	18	58	8	84	4	31	7	42	264
08:45 AM	12	49	4	65	8	37	9	54	13	68	5	86	11	32	8	51	256
Total	35	232	55	322	60	177	28	265	59	233	41	333	35	112	27	174	1094
Grand Total	111	638	146	895	118	408	119	645	128	586	91	805	88	244	54	386	2731
Apprch %	12.4	71.3	16.3		18.3	63.3	18.4		15.9	72.8	11.3		22.8	63.2	14		
Total %	4.1	23.4	5.3	32.8	4.3	14.9	4.4	23.6	4.7	21.5	3.3	29.5	3.2	8.9	2	14.1	

	San Antonio Avenue Southbound				9th Street Westbound				San Antonio Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	99	12	125	7	47	19	73	19	111	11	141	10	26	5	41	380
07:30 AM	25	**143**	31	**199**	21	73	**46**	**140**	19	**138**	**19**	**176**	**28**	**45**	**10**	**83**	**598**
07:45 AM	**32**	109	**36**	177	**22**	**75**	18	115	16	66	16	98	8	45	8	61	451
08:00 AM	10	69	21	100	17	55	12	84	**21**	58	10	89	10	33	6	49	322
Total Volume	81	420	100	601	67	250	95	412	75	373	56	504	56	149	29	234	1751
% App. Total	13.5	69.9	16.6		16.3	60.7	23.1		14.9	74	11.1		23.9	63.7	12.4		
PHF	.633	.734	.694	.755	.761	.833	.516	.736	.893	.676	.737	.716	.500	.828	.725	.705	.732

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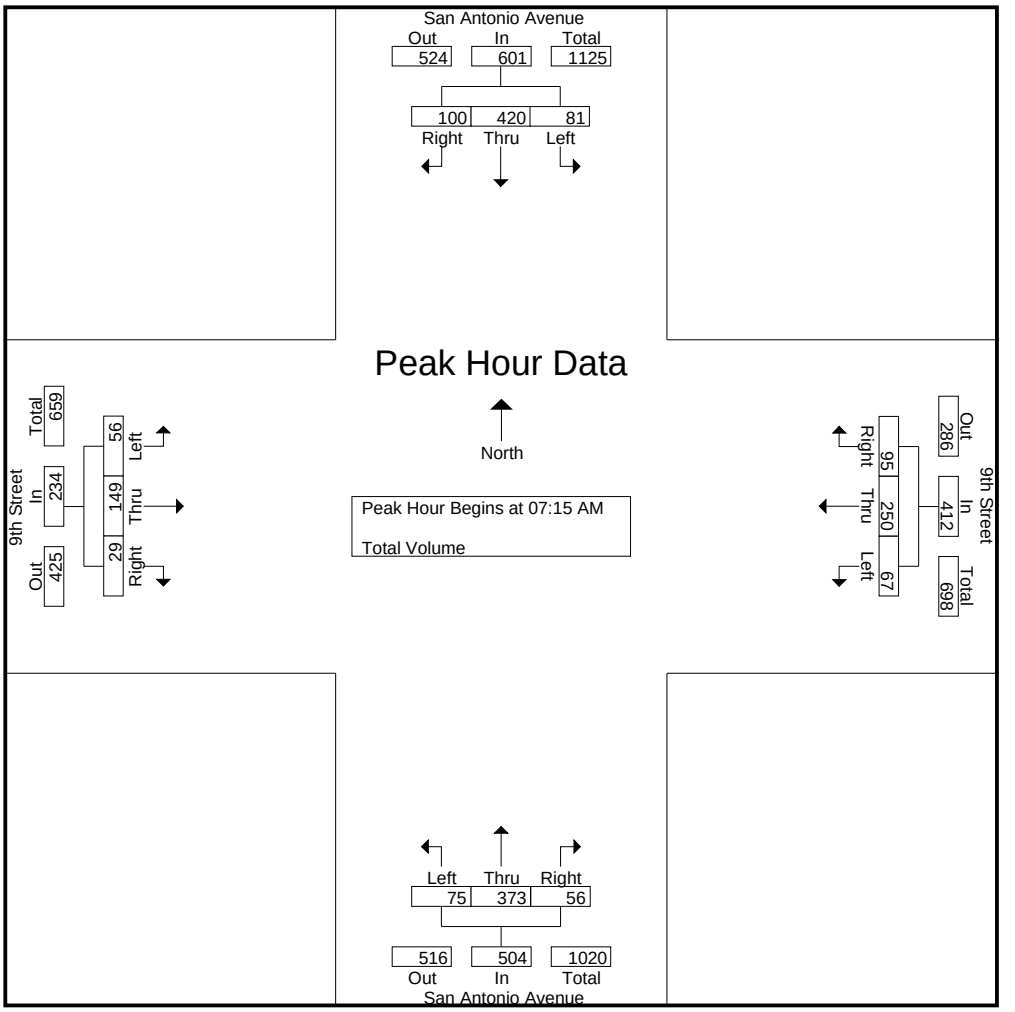

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	14	99	12	125	7	47	19	73	19	111	11	141	10	26	5	41
+15 mins.	25	**143**	31	**199**	21	73	**46**	**140**	19	**138**	**19**	**176**	**28**	**45**	**10**	**83**
+30 mins.	**32**	109	**36**	177	**22**	**75**	18	115	16	66	16	98	8	45	8	61
+45 mins.	10	69	21	100	17	55	12	84	**21**	58	10	89	10	33	6	49
Total Volume	81	420	100	601	67	250	95	412	75	373	56	504	56	149	29	234
% App. Total	13.5	69.9	16.6		16.3	60.7	23.1		14.9	74	11.1		23.9	63.7	12.4	
PHF	.633	.734	.694	.755	.761	.833	.516	.736	.893	.676	.737	.716	.500	.828	.725	.705

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N/S: San Antonio Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPSA9PM
Site Code : 03922441
Start Date : 6/3/2008
Page No : 1

Groups Printed- Total Volume

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04:00 PM	22	87	10	119	14	36	17	67	9	85	22	116	15	69	15	99	401
04:15 PM	14	95	5	114	19	43	7	69	10	100	27	137	16	49	14	79	399
04:30 PM	18	95	7	120	23	32	7	62	3	105	21	129	17	66	25	108	419
04:45 PM	18	100	6	124	11	46	11	68	8	96	12	116	13	60	14	87	395
Total	72	377	28	477	67	157	42	266	30	386	82	498	61	244	68	373	1614
05:00 PM	15	128	15	158	24	47	17	88	8	94	14	116	26	75	31	132	494
05:15 PM	11	108	10	129	12	37	12	61	6	126	24	156	20	63	22	105	451
05:30 PM	12	112	8	132	18	28	14	60	9	116	31	156	14	54	13	81	429
05:45 PM	14	102	9	125	14	34	12	60	9	84	20	113	18	55	8	81	379
Total	52	450	42	544	68	146	55	269	32	420	89	541	78	247	74	399	1753
Grand Total	124	827	70	1021	135	303	97	535	62	806	171	1039	139	491	142	772	3367
Apprch %	12.1	81	6.9		25.2	56.6	18.1		6	77.6	16.5		18	63.6	18.4		
Total %	3.7	24.6	2.1	30.3	4	9	2.9	15.9	1.8	23.9	5.1	30.9	4.1	14.6	4.2	22.9	

	San Antonio Avenue Southbound				9th Street Westbound				San Antonio Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**18**	100	6	124	11	46	11	68	8	96	12	116	13	60	14	87	395
05:00 PM	15	**128**	**15**	**158**	**24**	**47**	**17**	**88**	8	94	14	116	**26**	**75**	**31**	**132**	**494**
05:15 PM	11	108	10	129	12	37	12	61	6	**126**	24	**156**	20	63	22	105	451
05:30 PM	12	112	8	132	18	28	14	60	**9**	116	**31**	156	14	54	13	81	429
Total Volume	56	448	39	543	65	158	54	277	31	432	81	544	73	252	80	405	1769
% App. Total	10.3	82.5	7.2		23.5	57	19.5		5.7	79.4	14.9		18	62.2	19.8		
PHF	.778	.875	.650	.859	.677	.840	.794	.787	.861	.857	.653	.872	.702	.840	.645	.767	.895

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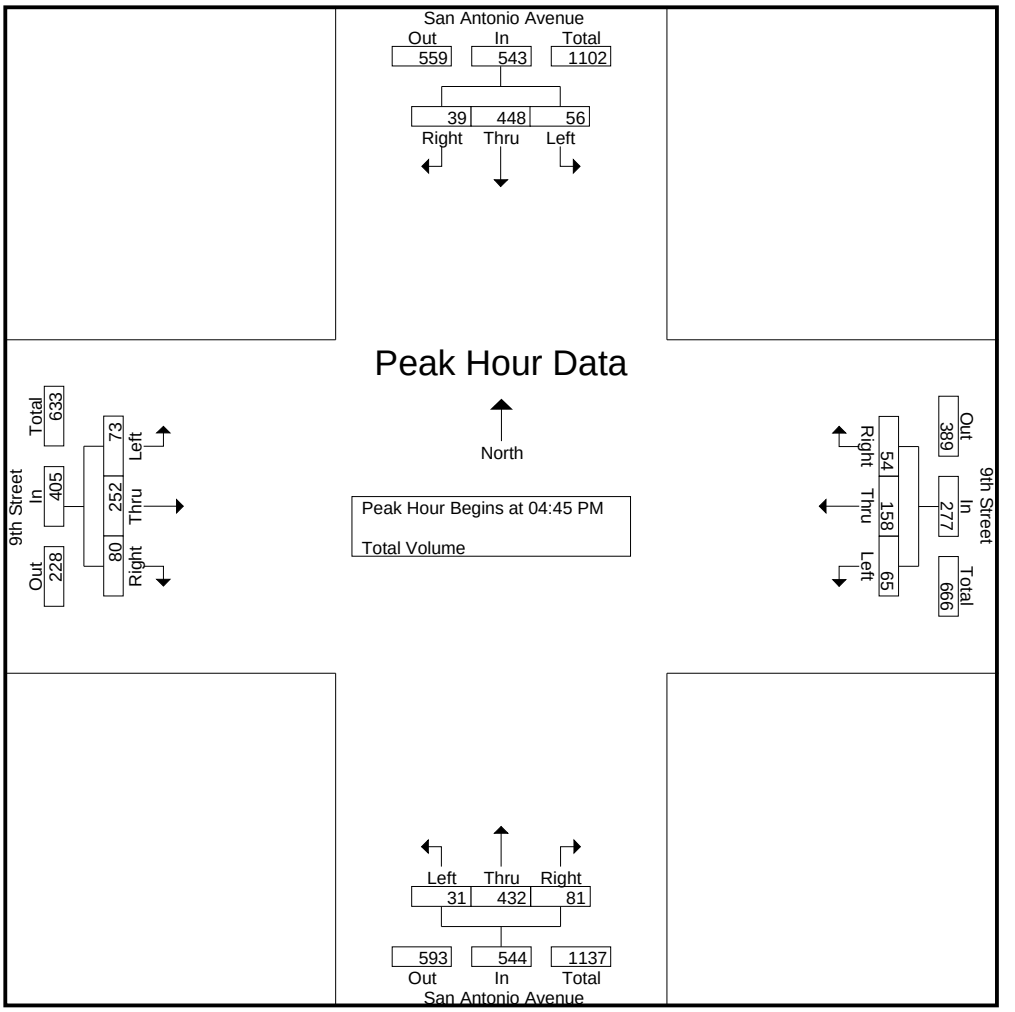

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				04:30 PM			
+0 mins.	**15**	**128**	**15**	**158**	19	43	7	69	8	96	12	116	17	66	25	108
+15 mins.	11	108	10	129	23	32	7	62	8	94	14	116	13	60	14	87
+30 mins.	12	112	8	132	11	46	11	68	6	**126**	24	**156**	**26**	**75**	**31**	**132**
+45 mins.	14	102	9	125	**24**	**47**	**17**	**88**	**9**	116	**31**	156	20	63	22	105
Total Volume	52	450	42	544	77	168	42	287	31	432	81	544	76	264	92	432
% App. Total	9.6	82.7	7.7		26.8	58.5	14.6		5.7	79.4	14.9		17.6	61.1	21.3	
PHF	.867	.879	.700	.861	.802	.894	.618	.815	.861	.857	.653	.872	.731	.880	.742	.818

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: San Antonio Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPSA8AM
Site Code : 03922429
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

	San Antonio Avenue Southbound				8th Street Westbound				San Antonio Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	29	12	47	2	30	14	46	13	34	2	49	13	30	5	48	190
07:15 AM	17	65	22	104	1	41	18	60	9	66	5	80	28	31	8	67	311
07:30 AM	18	68	52	138	9	50	26	85	15	90	5	110	59	34	10	103	436
07:45 AM	17	75	41	133	11	78	25	114	18	61	10	89	15	39	8	62	398
Total	58	237	127	422	23	199	83	305	55	251	22	328	115	134	31	280	1335
08:00 AM	13	60	22	95	18	83	18	119	9	73	10	92	14	43	10	67	373
08:15 AM	10	65	18	93	16	65	15	96	13	71	11	95	11	37	20	68	352
08:30 AM	5	42	11	58	5	53	18	76	12	55	8	75	18	48	7	73	282
08:45 AM	7	43	19	69	8	46	14	68	8	53	3	64	13	28	6	47	248
Total	35	210	70	315	47	247	65	359	42	252	32	326	56	156	43	255	1255
Grand Total	93	447	197	737	70	446	148	664	97	503	54	654	171	290	74	535	2590
Apprch %	12.6	60.7	26.7		10.5	67.2	22.3		14.8	76.9	8.3		32	54.2	13.8		
Total %	3.6	17.3	7.6	28.5	2.7	17.2	5.7	25.6	3.7	19.4	2.1	25.3	6.6	11.2	2.9	20.7	

	San Antonio Avenue Southbound				8th Street Westbound				San Antonio Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**18**	68	**52**	**138**	9	50	**26**	85	15	**90**	5	**110**	**59**	34	10	**103**	**436**
07:45 AM	17	**75**	41	133	11	78	25	114	**18**	61	10	89	15	39	8	62	398
08:00 AM	13	60	22	95	**18**	**83**	18	**119**	9	73	10	92	14	**43**	10	67	373
08:15 AM	10	65	18	93	16	65	15	96	13	71	**11**	95	11	37	**20**	68	352
Total Volume	58	268	133	459	54	276	84	414	55	295	36	386	99	153	48	300	1559
% App. Total	12.6	58.4	29		13	66.7	20.3		14.2	76.4	9.3		33	51	16		
PHF	.806	.893	.639	.832	.750	.831	.808	.870	.764	.819	.818	.877	.419	.890	.600	.728	.894

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: San Antonio Avenue
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File Name : UPSA8AM
Site Code : 03922429
Start Date : 6/4/2008
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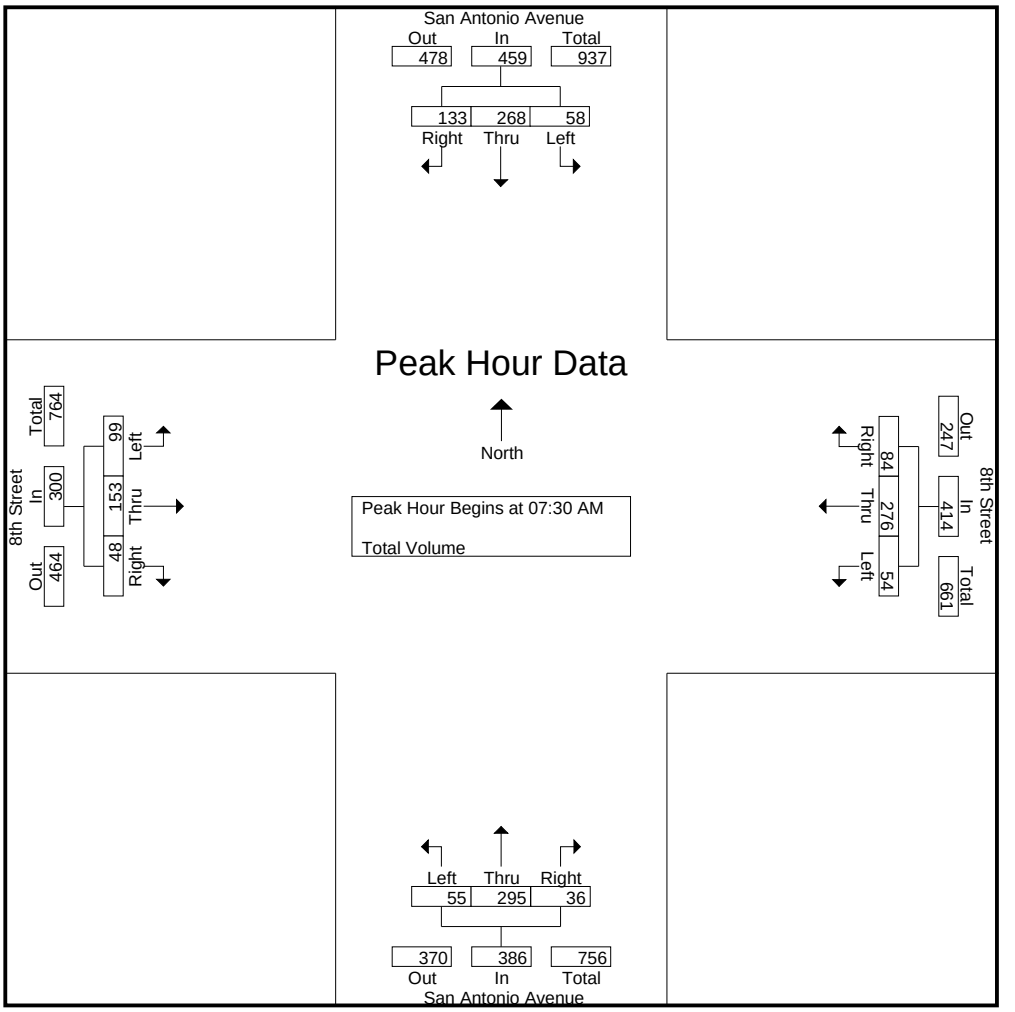

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	17	65	22	104	9	50	**26**	85	15	**90**	5	**110**	**59**	34	10	**103**
+15 mins.	**18**	68	**52**	**138**	11	78	25	114	**18**	61	10	89	15	39	8	62
+30 mins.	17	**75**	41	133	**18**	**83**	18	**119**	9	73	10	92	14	**43**	10	67
+45 mins.	13	60	22	95	16	65	15	96	13	71	**11**	95	11	37	**20**	68
Total Volume	65	268	137	470	54	276	84	414	55	295	36	386	99	153	48	300
% App. Total	13.8	57	29.1		13	66.7	20.3		14.2	76.4	9.3		33	51	16	
PHF	.903	.893	.659	.851	.750	.831	.808	.870	.764	.819	.818	.877	.419	.890	.600	.728

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: San Antonio Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPSA8PM
Site Code : 03922429
Start Date : 6/3/2008
Page No : 1

Groups Printed- Total Volume

	San Antonio Avenue Southbound				8th Street Westbound				San Antonio Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	15	88	26	129	3	44	18	65	22	75	4	101	27	66	27	120	415
04:15 PM	9	79	31	119	8	54	18	80	15	89	5	109	32	72	24	128	436
04:30 PM	20	98	30	148	10	61	21	92	18	96	7	121	30	83	24	137	498
04:45 PM	12	102	35	149	8	61	18	87	15	69	9	93	43	77	36	156	485
Total	56	367	122	545	29	220	75	324	70	329	25	424	132	298	111	541	1834
05:00 PM	23	115	41	179	10	50	11	71	18	73	2	93	32	81	22	135	478
05:15 PM	16	113	25	154	11	70	17	98	17	100	6	123	43	101	27	171	546
05:30 PM	17	97	26	140	9	49	27	85	18	88	16	122	48	92	25	165	512
05:45 PM	10	89	35	134	10	53	16	79	20	72	5	97	31	71	28	130	440
Total	66	414	127	607	40	222	71	333	73	333	29	435	154	345	102	601	1976
Grand Total	122	781	249	1152	69	442	146	657	143	662	54	859	286	643	213	1142	3810
Apprch %	10.6	67.8	21.6		10.5	67.3	22.2		16.6	77.1	6.3		25	56.3	18.7		
Total %	3.2	20.5	6.5	30.2	1.8	11.6	3.8	17.2	3.8	17.4	1.4	22.5	7.5	16.9	5.6	30	

	San Antonio Avenue Southbound				8th Street Westbound				San Antonio Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	12	102	35	149	8	61	18	87	15	69	9	93	43	77	**36**	156	485
05:00 PM	**23**	**115**	**41**	**179**	10	50	11	71	**18**	73	2	93	32	81	22	135	478
05:15 PM	16	113	25	154	**11**	**70**	17	**98**	17	**100**	6	**123**	43	**101**	27	**171**	**546**
05:30 PM	17	97	26	140	9	49	**27**	85	18	88	**16**	122	**48**	92	25	165	512
Total Volume	68	427	127	622	38	230	73	341	68	330	33	431	166	351	110	627	2021
% App. Total	10.9	68.6	20.4		11.1	67.4	21.4		15.8	76.6	7.7		26.5	56	17.5		
PHF	.739	.928	.774	.869	.864	.821	.676	.870	.944	.825	.516	.876	.865	.869	.764	.917	.925

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: San Antonio Avenue
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Weather: Sunny

File Name : UPSA8PM
Site Code : 03922429
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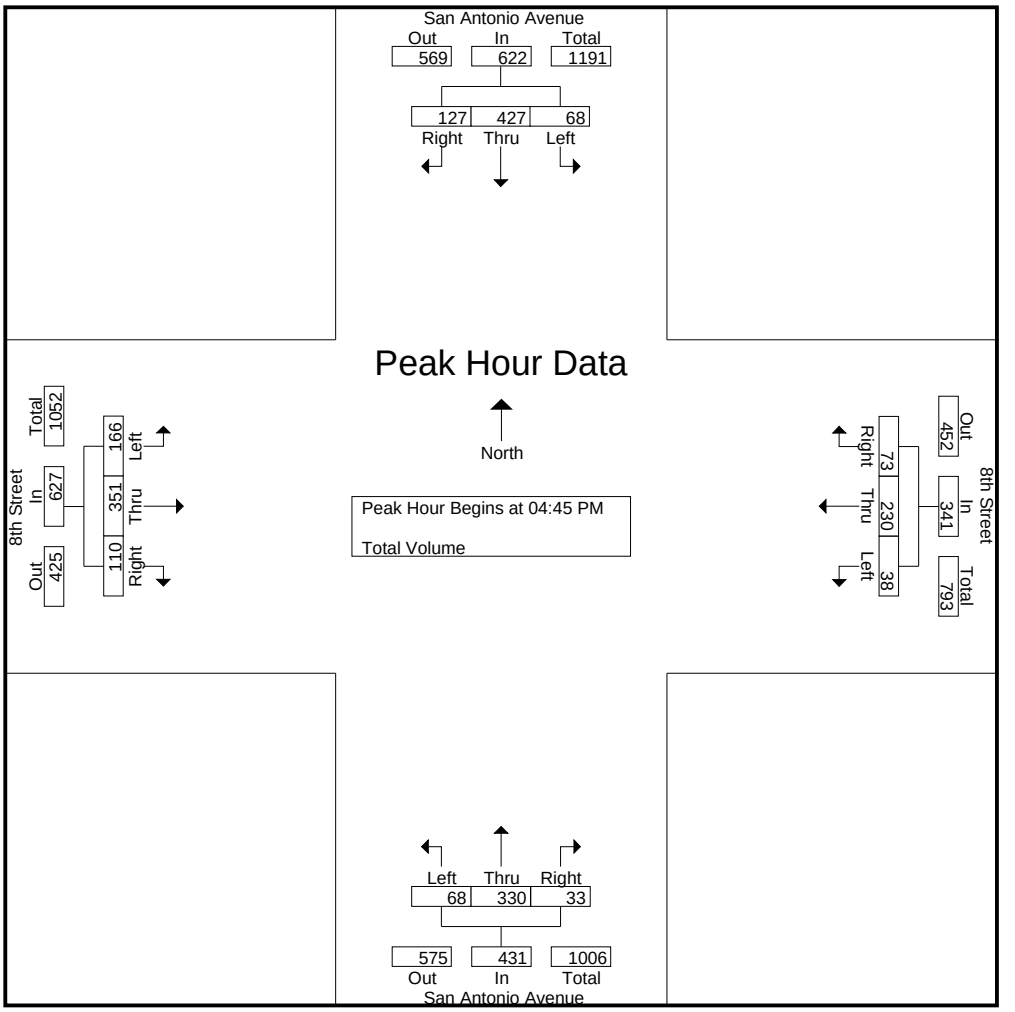

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				05:00 PM				04:45 PM			
+0 mins.	20	98	30	148	10	61	**21**	92	18	73	2	93	43	77	**36**	156
+15 mins.	12	102	35	149	8	61	18	87	17	**100**	6	**123**	32	81	22	135
+30 mins.	**23**	**115**	**41**	**179**	10	50	11	71	18	88	**16**	122	43	**101**	27	**171**
+45 mins.	16	113	25	154	**11**	**70**	17	**98**	**20**	72	5	97	**48**	92	25	165
Total Volume	71	428	131	630	39	242	67	348	73	333	29	435	166	351	110	627
% App. Total	11.3	67.9	20.8		11.2	69.5	19.3		16.8	76.6	6.7		26.5	56	17.5	
PHF	.772	.930	.799	.880	.886	.864	.798	.888	.913	.833	.453	.884	.865	.869	.764	.917

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UPGRARAM
Site Code : 03922434
Start Date : 6/3/2008
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Groups Printed- Total Volume

	Grove Avenue Southbound				Arrow Highway Westbound				Grove Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	62	1	74	24	43	17	84	17	66	17	100	2	20	5	27	285
07:15 AM	13	89	4	106	43	59	14	116	12	67	17	96	4	41	3	48	366
07:30 AM	19	102	3	124	38	69	17	124	13	81	24	118	4	32	15	51	417
07:45 AM	19	111	8	138	37	88	18	143	22	83	36	141	2	57	6	65	487
Total	62	364	16	442	142	259	66	467	64	297	94	455	12	150	29	191	1555
08:00 AM	17	80	9	106	32	52	21	105	12	84	36	132	2	38	7	47	390
08:15 AM	23	91	8	122	23	48	16	87	15	98	21	134	0	38	8	46	389
08:30 AM	16	65	5	86	22	58	12	92	25	61	18	104	0	30	11	41	323
08:45 AM	11	69	8	88	19	52	19	90	21	102	11	134	5	35	9	49	361
Total	67	305	30	402	96	210	68	374	73	345	86	504	7	141	35	183	1463
Grand Total	129	669	46	844	238	469	134	841	137	642	180	959	19	291	64	374	3018
Apprch %	15.3	79.3	5.5		28.3	55.8	15.9		14.3	66.9	18.8		5.1	77.8	17.1		
Total %	4.3	22.2	1.5	28	7.9	15.5	4.4	27.9	4.5	21.3	6	31.8	0.6	9.6	2.1	12.4	

	Grove Avenue Southbound				Arrow Highway Westbound				Grove Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	19	102	3	124	**38**	69	17	124	13	81	24	118	**4**	32	**15**	51	417
07:45 AM	19	**111**	8	**138**	37	**88**	18	**143**	**22**	83	**36**	**141**	2	**57**	6	**65**	**487**
08:00 AM	17	80	**9**	106	32	52	**21**	105	12	84	36	132	2	38	7	47	390
08:15 AM	**23**	91	8	122	23	48	16	87	15	**98**	21	134	0	38	8	46	389
Total Volume	78	384	28	490	130	257	72	459	62	346	117	525	8	165	36	209	1683
% App. Total	15.9	78.4	5.7		28.3	56	15.7		11.8	65.9	22.3		3.8	78.9	17.2		
PHF	.848	.865	.778	.888	.855	.730	.857	.802	.705	.883	.813	.931	.500	.724	.600	.804	.864

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
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Weather: Sunny

File Name : UPGRARAM
Site Code : 03922434
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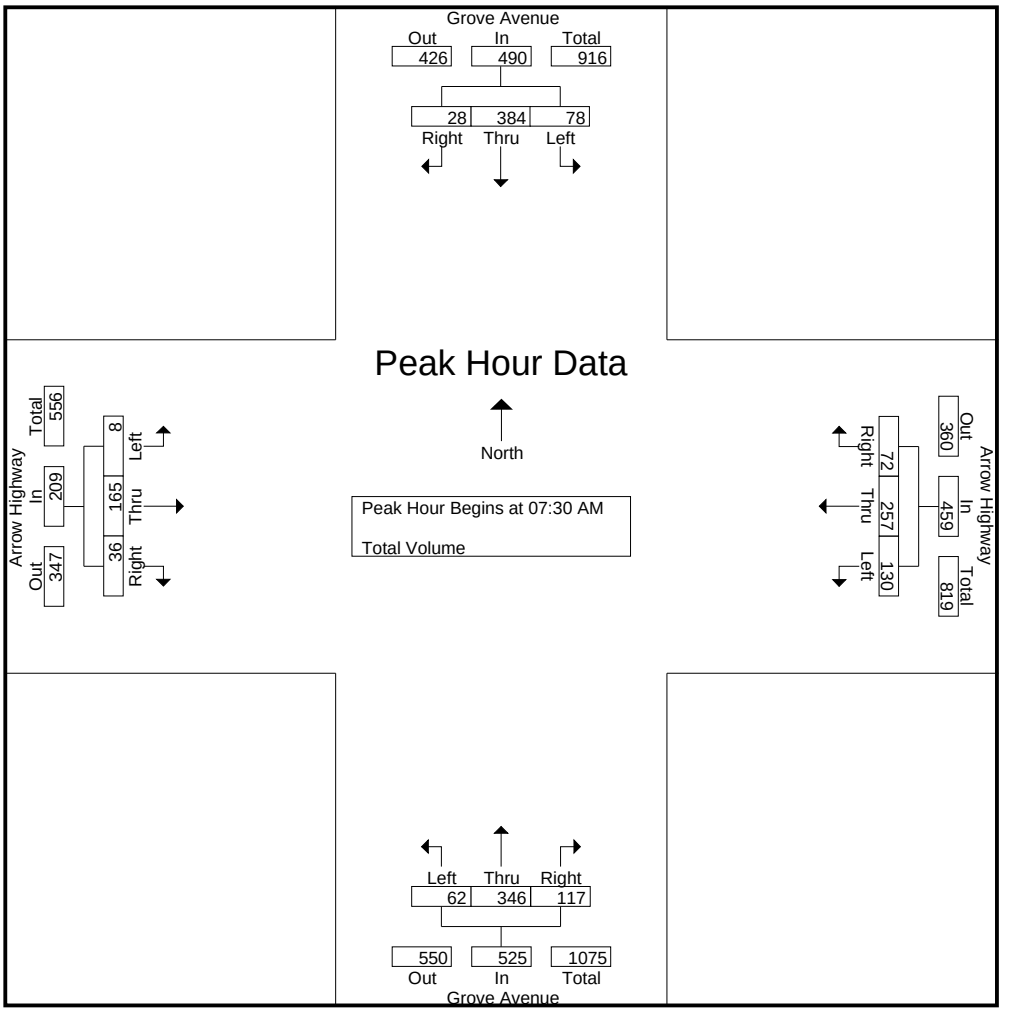

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	19	102	3	124	**43**	59	14	116	13	81	24	118	**4**	41	3	48
+15 mins.	19	**111**	8	**138**	38	69	17	124	**22**	83	**36**	**141**	4	32	**15**	51
+30 mins.	17	80	**9**	106	37	**88**	18	**143**	12	84	36	132	2	**57**	6	**65**
+45 mins.	**23**	91	8	122	32	52	**21**	105	15	**98**	21	134	2	38	7	47
Total Volume	78	384	28	490	150	268	70	488	62	346	117	525	12	168	31	211
% App. Total	15.9	78.4	5.7		30.7	54.9	14.3		11.8	65.9	22.3		5.7	79.6	14.7	
PHF	.848	.865	.778	.888	.872	.761	.833	.853	.705	.883	.813	.931	.750	.737	.517	.812

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of Upland
N/S: Grove Avenue
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Site Code : 03922434
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Groups Printed- Total Volume

	Grove Avenue Southbound				Arrow Highway Westbound				Grove Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	83	7	114	24	45	13	82	11	109	25	145	7	70	19	96	437
04:15 PM	11	91	4	106	21	60	29	110	16	112	31	159	6	58	14	78	453
04:30 PM	21	83	2	106	18	49	20	87	11	93	33	137	5	74	16	95	425
04:45 PM	26	95	5	126	20	49	31	100	10	114	32	156	5	71	15	91	473
Total	82	352	18	452	83	203	93	379	48	428	121	597	23	273	64	360	1788
05:00 PM	24	115	5	144	17	62	15	94	5	116	28	149	6	85	25	116	503
05:15 PM	28	109	1	138	20	63	22	105	7	123	44	174	4	53	15	72	489
05:30 PM	15	89	4	108	21	64	34	119	9	114	31	154	5	51	23	79	460
05:45 PM	10	89	4	103	12	61	25	98	9	143	28	180	4	56	13	73	454
Total	77	402	14	493	70	250	96	416	30	496	131	657	19	245	76	340	1906
Grand Total	159	754	32	945	153	453	189	795	78	924	252	1254	42	518	140	700	3694
Apprch %	16.8	79.8	3.4		19.2	57	23.8		6.2	73.7	20.1		6	74	20		
Total %	4.3	20.4	0.9	25.6	4.1	12.3	5.1	21.5	2.1	25	6.8	33.9	1.1	14	3.8	18.9	

	Grove Avenue Southbound				Arrow Highway Westbound				Grove Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	26	95	**5**	126	20	49	31	100	**10**	114	32	156	5	71	15	91	473
05:00 PM	24	**115**	5	**144**	17	62	15	94	5	116	28	149	**6**	**85**	**25**	**116**	**503**
05:15 PM	**28**	109	1	138	20	63	22	105	7	**123**	**44**	**174**	4	53	15	72	489
05:30 PM	15	89	4	108	**21**	**64**	**34**	**119**	9	114	31	154	5	51	23	79	460
Total Volume	93	408	15	516	78	238	102	418	31	467	135	633	20	260	78	358	1925
% App. Total	18	79.1	2.9		18.7	56.9	24.4		4.9	73.8	21.3		5.6	72.6	21.8		
PHF	.830	.887	.750	.896	.929	.930	.750	.878	.775	.949	.767	.909	.833	.765	.780	.772	.957

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of Upland
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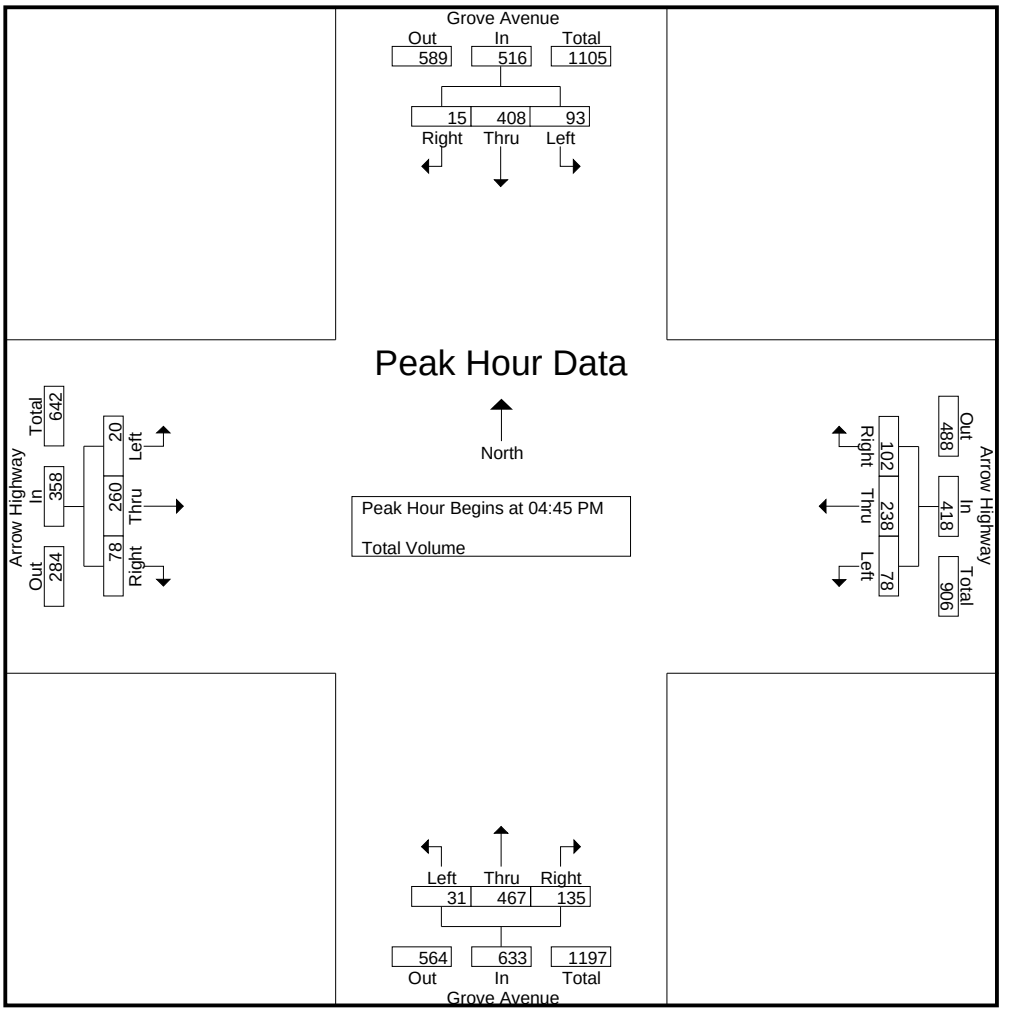

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				05:00 PM				04:15 PM			
+0 mins.	26	95	**5**	126	20	49	31	100	5	116	28	149	**6**	58	14	78
+15 mins.	24	**115**	5	**144**	17	62	15	94	7	123	**44**	174	5	74	16	95
+30 mins.	**28**	109	1	138	20	63	22	105	**9**	114	31	154	5	71	15	91
+45 mins.	15	89	4	108	**21**	**64**	**34**	**119**	9	**143**	28	**180**	6	**85**	**25**	**116**
Total Volume	93	408	15	516	78	238	102	418	30	496	131	657	22	288	70	380
% App. Total	18	79.1	2.9		18.7	56.9	24.4		4.6	75.5	19.9		5.8	75.8	18.4	
PHF	.830	.887	.750	.896	.929	.930	.750	.878	.833	.867	.744	.913	.917	.847	.700	.819

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPGR9AM
Site Code : 03922420
Start Date : 6/3/2008
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Groups Printed- Total Volume

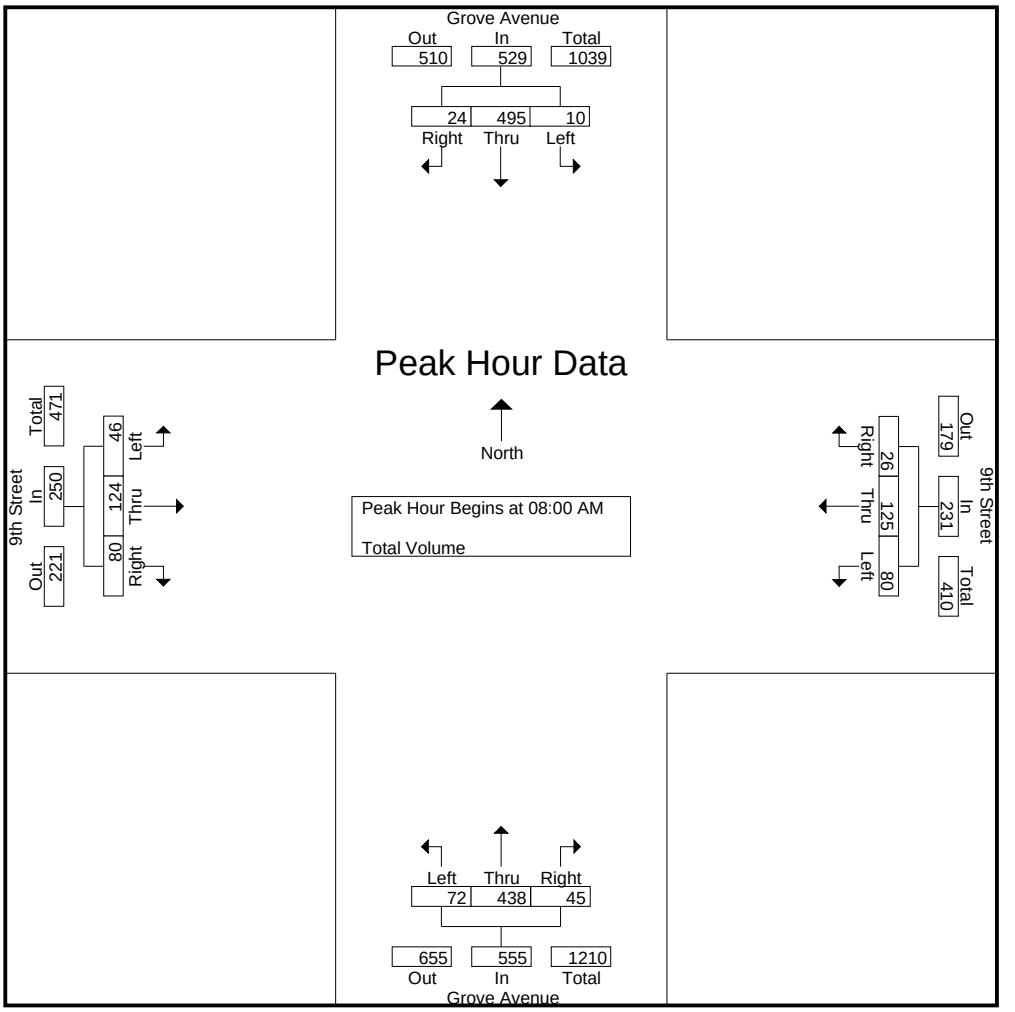
	Grove Avenue Southbound				9th Street Westbound				Grove Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	90	4	97	17	21	5	43	3	98	7	108	3	17	12	32	280
07:15 AM	3	94	5	102	10	16	2	28	13	123	7	143	9	19	14	42	315
07:30 AM	0	83	9	92	20	12	5	37	9	91	2	102	7	9	20	36	267
07:45 AM	3	117	8	128	22	28	4	54	14	84	10	108	8	19	17	44	334
Total	9	384	26	419	69	77	16	162	39	396	26	461	27	64	63	154	1196
08:00 AM	2	140	7	149	23	30	6	59	23	98	13	134	12	23	23	58	400
08:15 AM	2	143	9	154	16	29	3	48	21	128	10	159	13	35	22	70	431
08:30 AM	2	100	3	105	19	35	12	66	16	101	14	131	13	31	18	62	364
08:45 AM	4	112	5	121	22	31	5	58	12	111	8	131	8	35	17	60	370
Total	10	495	24	529	80	125	26	231	72	438	45	555	46	124	80	250	1565
Grand Total	19	879	50	948	149	202	42	393	111	834	71	1016	73	188	143	404	2761
Apprch %	2	92.7	5.3		37.9	51.4	10.7		10.9	82.1	7		18.1	46.5	35.4		
Total %	0.7	31.8	1.8	34.3	5.4	7.3	1.5	14.2	4	30.2	2.6	36.8	2.6	6.8	5.2	14.6	

	Grove Avenue Southbound				9th Street Westbound				Grove Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	2	140	7	149	**23**	30	6	59	**23**	98	13	134	12	23	**23**	58	400
08:15 AM	2	**143**	**9**	**154**	16	29	3	48	21	**128**	10	**159**	**13**	**35**	22	**70**	**431**
08:30 AM	2	100	3	105	19	**35**	**12**	**66**	16	101	**14**	131	13	31	18	62	364
08:45 AM	**4**	112	5	121	22	31	5	58	12	111	8	131	8	35	17	60	370
Total Volume	10	495	24	529	80	125	26	231	72	438	45	555	46	124	80	250	1565
% App. Total	1.9	93.6	4.5		34.6	54.1	11.3		13	78.9	8.1		18.4	49.6	32		
PHF	.625	.865	.667	.859	.870	.893	.542	.875	.783	.855	.804	.873	.885	.886	.870	.893	.908

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPGR9AM
Site Code : 03922420
Start Date : 6/3/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**3**	117	8	128	**23**	30	6	59	**23**	98	13	134	12	23	**23**	58
+15 mins.	2	140	7	149	16	29	3	48	21	**128**	10	**159**	**13**	**35**	22	**70**
+30 mins.	2	**143**	**9**	**154**	19	**35**	**12**	**66**	16	101	**14**	131	13	31	18	62
+45 mins.	2	100	3	105	22	31	5	58	12	111	8	131	8	35	17	60
Total Volume	9	500	27	536	80	125	26	231	72	438	45	555	46	124	80	250
% App. Total	1.7	93.3	5		34.6	54.1	11.3		13	78.9	8.1		18.4	49.6	32	
PHF	.750	.874	.750	.870	.870	.893	.542	.875	.783	.855	.804	.873	.885	.886	.870	.893

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPGR9PM
Site Code : 13418557
Start Date : 5/29/2008

Groups Printed- Total Volume

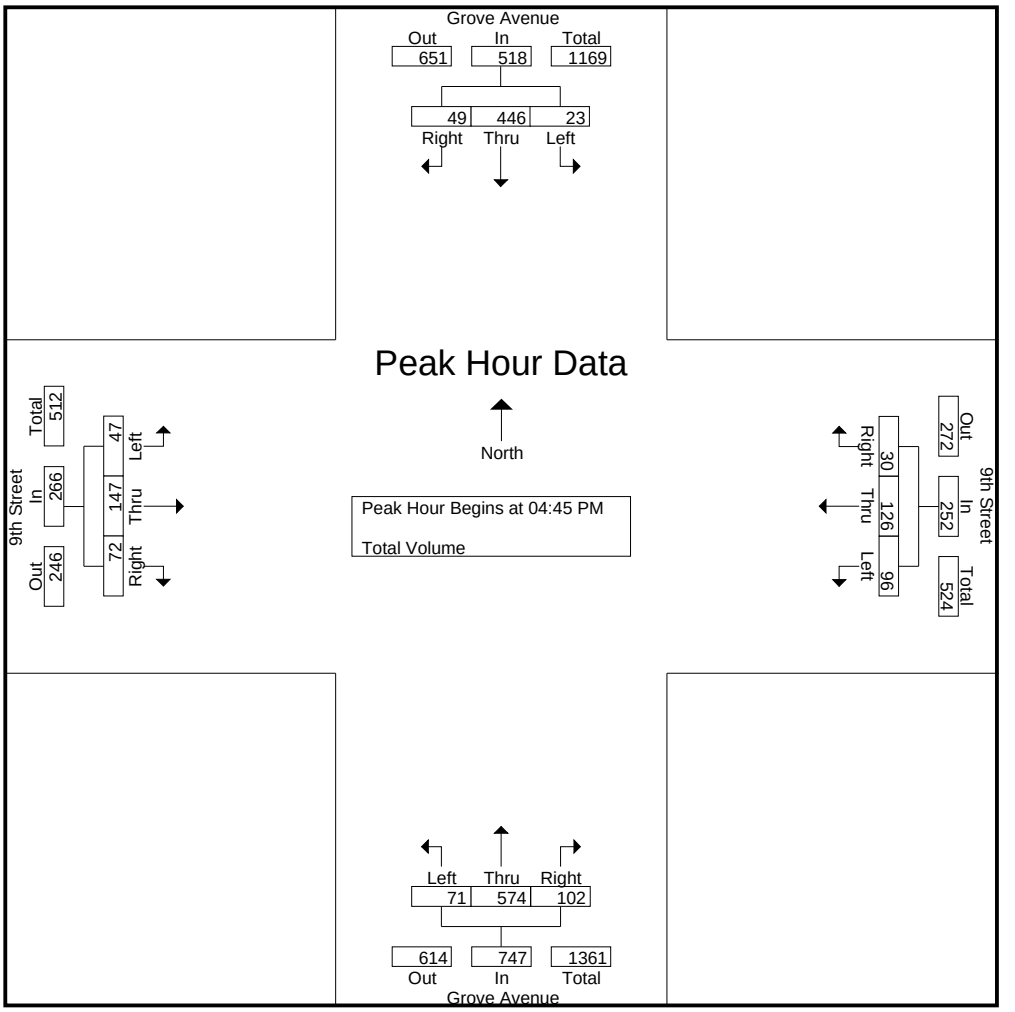
	Grove Avenue Southbound				9th Street Westbound				Grove Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	102	11	119	12	36	6	54	20	144	28	192	11	18	24	53	418
04:15 PM	3	115	10	128	20	31	5	56	19	112	20	151	12	16	12	40	375
04:30 PM	2	133	7	142	27	20	7	54	21	101	18	140	18	31	21	70	406
04:45 PM	7	105	13	125	16	33	10	59	19	135	26	180	11	34	19	64	428
Total	18	455	41	514	75	120	28	223	79	492	92	663	52	99	76	227	1627
05:00 PM	2	115	11	128	25	35	4	64	15	151	34	200	10	39	22	71	463
05:15 PM	6	132	15	153	24	29	9	62	16	147	19	182	9	42	17	68	465
05:30 PM	8	94	10	112	31	29	7	67	21	141	23	185	17	32	14	63	427
05:45 PM	3	105	12	120	16	33	4	53	13	153	26	192	15	38	20	73	438
Total	19	446	48	513	96	126	24	246	65	592	102	759	51	151	73	275	1793
Grand Total	37	901	89	1027	171	246	52	469	144	1084	194	1422	103	250	149	502	3420
Apprch %	3.6	87.7	8.7		36.5	52.5	11.1		10.1	76.2	13.6		20.5	49.8	29.7		
Total %	1.1	26.3	2.6	30	5	7.2	1.5	13.7	4.2	31.7	5.7	41.6	3	7.3	4.4	14.7	

	Grove Avenue Southbound				9th Street Westbound				Grove Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	7	105	13	125	16	33	**10**	59	19	135	26	180	11	34	19	64	428
05:00 PM	2	115	11	128	25	**35**	4	64	15	**151**	**34**	**200**	10	39	**22**	**71**	463
05:15 PM	6	**132**	**15**	**153**	24	29	9	62	16	147	19	182	9	**42**	17	68	**465**
05:30 PM	**8**	94	10	112	**31**	29	7	**67**	**21**	141	23	185	**17**	32	14	63	427
Total Volume	23	446	49	518	96	126	30	252	71	574	102	747	47	147	72	266	1783
% App. Total	4.4	86.1	9.5		38.1	50	11.9		9.5	76.8	13.7		17.7	55.3	27.1		
PHF	.719	.845	.817	.846	.774	.900	.750	.940	.845	.950	.750	.934	.691	.875	.818	.937	.959

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPGR9PM
Site Code : 13418557
Start Date : 5/29/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:45 PM				04:30 PM			
+0 mins.	2	**133**	7	142	16	33	**10**	59	19	135	26	180	**18**	31	21	70
+15 mins.	**7**	105	13	125	25	**35**	4	64	15	**151**	**34**	**200**	11	34	19	64
+30 mins.	2	115	11	128	24	29	9	62	16	147	19	182	10	39	**22**	**71**
+45 mins.	6	132	**15**	**153**	**31**	29	7	**67**	**21**	141	23	185	9	**42**	17	68
Total Volume	17	485	46	548	96	126	30	252	71	574	102	747	48	146	79	273
% App. Total	3.1	88.5	8.4		38.1	50	11.9		9.5	76.8	13.7		17.6	53.5	28.9	
PHF	.607	.912	.767	.895	.774	.900	.750	.940	.845	.950	.750	.934	.667	.869	.898	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPGR8AM
Site Code : 03922457
Start Date : 5/28/2008
Page No : 1

Groups Printed- Total Volume

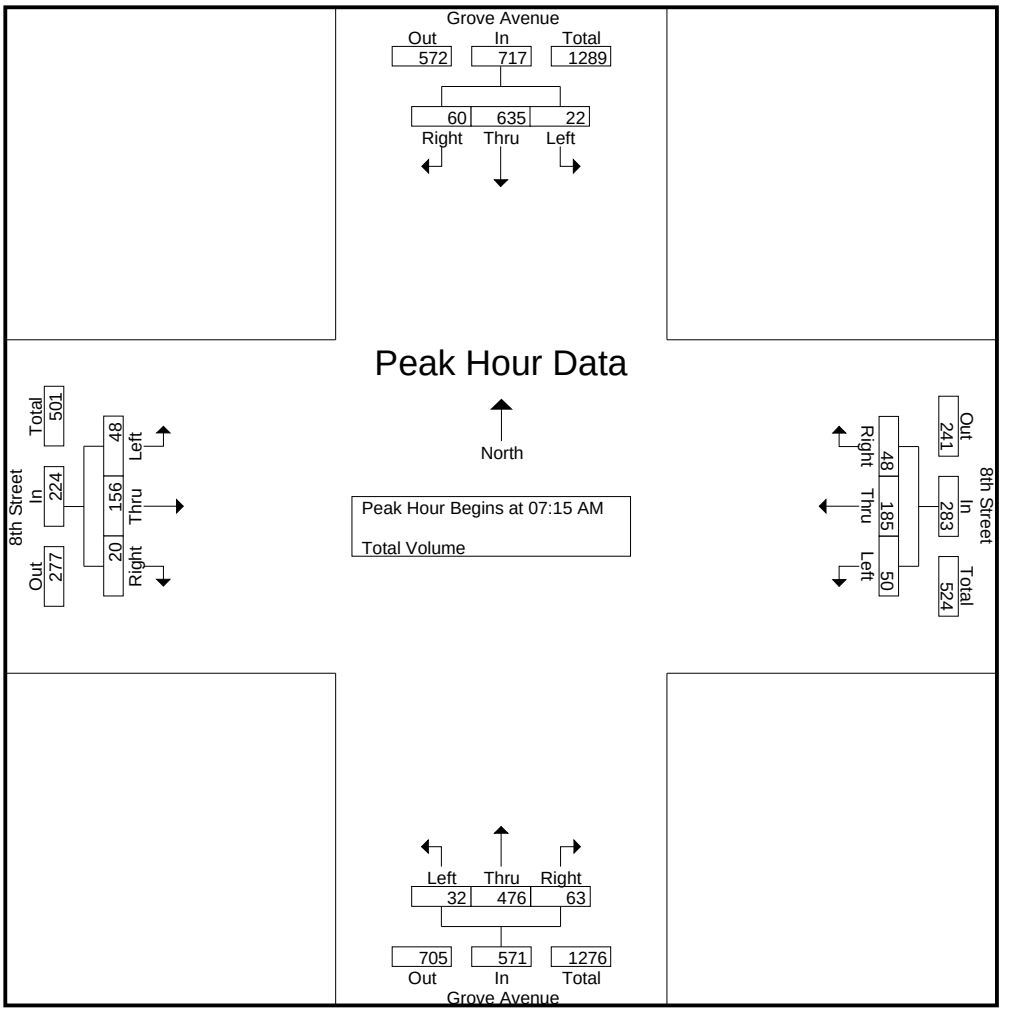
	Grove Avenue Southbound				8th Street Westbound				Grove Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	173	10	188	9	13	4	26	6	119	10	135	4	12	7	23	372
07:15 AM	6	174	12	192	9	41	7	57	8	120	11	139	9	27	7	43	431
07:30 AM	5	190	22	217	15	55	14	84	8	96	14	118	10	45	6	61	480
07:45 AM	6	118	13	137	11	43	11	65	7	140	19	166	13	53	6	72	440
Total	22	655	57	734	44	152	36	232	29	475	54	558	36	137	26	199	1723
08:00 AM	5	153	13	171	15	46	16	77	9	120	19	148	16	31	1	48	444
08:15 AM	9	124	6	139	8	40	7	55	7	119	15	141	8	26	1	35	370
08:30 AM	7	115	11	133	8	50	17	75	10	117	10	137	9	20	3	32	377
08:45 AM	3	97	16	116	7	46	8	61	5	111	10	126	8	25	3	36	339
Total	24	489	46	559	38	182	48	268	31	467	54	552	41	102	8	151	1530
Grand Total	46	1144	103	1293	82	334	84	500	60	942	108	1110	77	239	34	350	3253
Apprch %	3.6	88.5	8		16.4	66.8	16.8		5.4	84.9	9.7		22	68.3	9.7		
Total %	1.4	35.2	3.2	39.7	2.5	10.3	2.6	15.4	1.8	29	3.3	34.1	2.4	7.3	1	10.8	

	Grove Avenue Southbound				8th Street Westbound				Grove Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**6**	174	12	192	9	41	7	57	8	120	11	139	9	27	**7**	43	431
07:30 AM	5	**190**	**22**	**217**	**15**	**55**	14	**84**	8	96	14	118	10	45	6	61	**480**
07:45 AM	6	118	13	137	11	43	11	65	7	**140**	**19**	**166**	13	**53**	6	**72**	440
08:00 AM	5	153	13	171	15	46	**16**	77	**9**	120	19	148	**16**	31	1	48	444
Total Volume	22	635	60	717	50	185	48	283	32	476	63	571	48	156	20	224	1795
% App. Total	3.1	88.6	8.4		17.7	65.4	17		5.6	83.4	11		21.4	69.6	8.9		
PHF	.917	.836	.682	.826	.833	.841	.750	.842	.889	.850	.829	.860	.750	.736	.714	.778	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPGR8AM
Site Code : 03922457
Start Date : 5/28/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:45 AM				07:15 AM			
+0 mins.	5	173	10	188	9	41	7	57	7	**140**	**19**	**166**	9	27	**7**	43
+15 mins.	**6**	174	12	192	**15**	**55**	14	**84**	9	120	19	148	10	45	6	61
+30 mins.	5	**190**	**22**	**217**	11	43	11	65	7	119	15	141	13	**53**	6	**72**
+45 mins.	6	118	13	137	15	46	**16**	77	**10**	117	10	137	**16**	31	1	48
Total Volume	22	655	57	734	50	185	48	283	33	496	63	592	48	156	20	224
% App. Total	3	89.2	7.8		17.7	65.4	17		5.6	83.8	10.6		21.4	69.6	8.9	
PHF	.917	.862	.648	.846	.833	.841	.750	.842	.825	.886	.829	.892	.750	.736	.714	.778

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPGR8PM
Site Code : 03922457
Start Date : 5/28/2008

Groups Printed- Total Volume

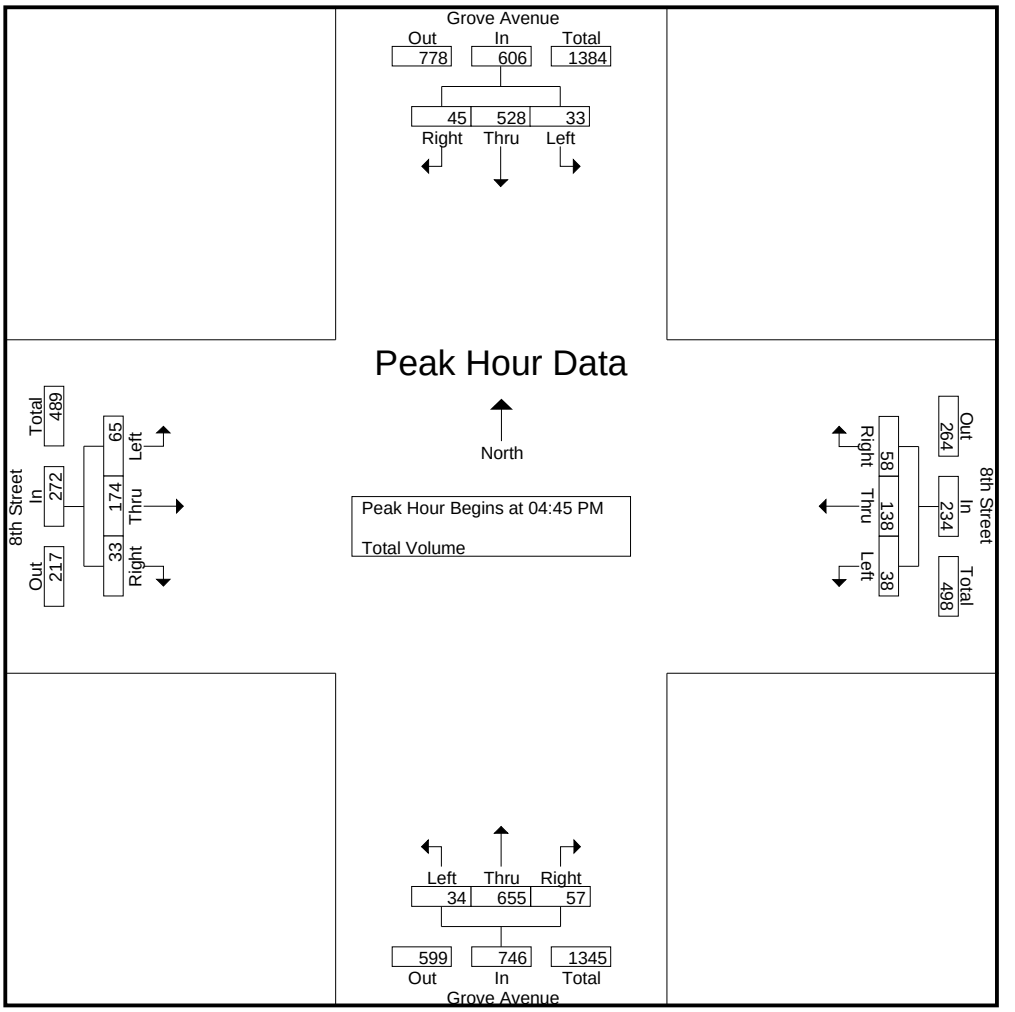
	Grove Avenue Southbound				8th Street Westbound				Grove Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	99	6	111	7	30	13	50	4	84	8	96	13	28	6	47	304
04:15 PM	8	126	7	141	9	38	16	63	5	107	10	122	17	35	7	59	385
04:30 PM	7	121	5	133	17	44	15	76	7	156	11	174	18	43	3	64	447
04:45 PM	11	148	12	171	9	35	18	62	5	152	12	169	12	42	6	60	462
Total	32	494	30	556	42	147	62	251	21	499	41	561	60	148	22	230	1598
05:00 PM	8	147	14	169	12	51	13	76	9	172	15	196	20	45	7	72	513
05:15 PM	8	98	8	114	14	31	15	60	11	162	13	186	12	34	14	60	420
05:30 PM	6	135	11	152	3	21	12	36	9	169	17	195	21	53	6	80	463
05:45 PM	6	122	9	137	8	32	10	50	8	177	13	198	15	50	10	75	460
Total	28	502	42	572	37	135	50	222	37	680	58	775	68	182	37	287	1856
Grand Total	60	996	72	1128	79	282	112	473	58	1179	99	1336	128	330	59	517	3454
Apprch %	5.3	88.3	6.4		16.7	59.6	23.7		4.3	88.2	7.4		24.8	63.8	11.4		
Total %	1.7	28.8	2.1	32.7	2.3	8.2	3.2	13.7	1.7	34.1	2.9	38.7	3.7	9.6	1.7	15	

	Grove Avenue Southbound				8th Street Westbound				Grove Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**11**	**148**	12	**171**	9	35	**18**	62	5	152	12	169	12	42	6	60	462
05:00 PM	8	147	**14**	169	12	**51**	13	**76**	9	**172**	15	**196**	20	45	7	72	**513**
05:15 PM	8	98	8	114	**14**	31	15	60	**11**	162	13	186	12	34	**14**	60	420
05:30 PM	6	135	11	152	3	21	12	36	9	169	**17**	195	**21**	**53**	6	**80**	463
Total Volume	33	528	45	606	38	138	58	234	34	655	57	746	65	174	33	272	1858
% App. Total	5.4	87.1	7.4		16.2	59	24.8		4.6	87.8	7.6		23.9	64	12.1		
PHF	.750	.892	.804	.886	.679	.676	.806	.770	.773	.952	.838	.952	.774	.821	.589	.850	.905

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Grove Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPGR8PM
Site Code : 03922457
Start Date : 5/28/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	8	126	7	141	9	38	16	63	5	152	12	169	12	42	6	60
+15 mins.	7	121	5	133	**17**	44	15	**76**	9	**172**	15	**196**	20	45	7	72
+30 mins.	**11**	**148**	12	**171**	9	35	**18**	62	**11**	162	13	186	12	34	**14**	60
+45 mins.	8	147	**14**	169	12	**51**	13	76	9	169	**17**	195	**21**	**53**	6	**80**
Total Volume	34	542	38	614	47	168	62	277	34	655	57	746	65	174	33	272
% App. Total	5.5	88.3	6.2		17	60.6	22.4		4.6	87.8	7.6		23.9	64	12.1	
PHF	.773	.916	.679	.898	.691	.824	.861	.911	.773	.952	.838	.952	.774	.821	.589	.850

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: E Foothill Boulevard
Weather: Sunny

File Name : UPEUFOAM
Site Code : 03922433
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

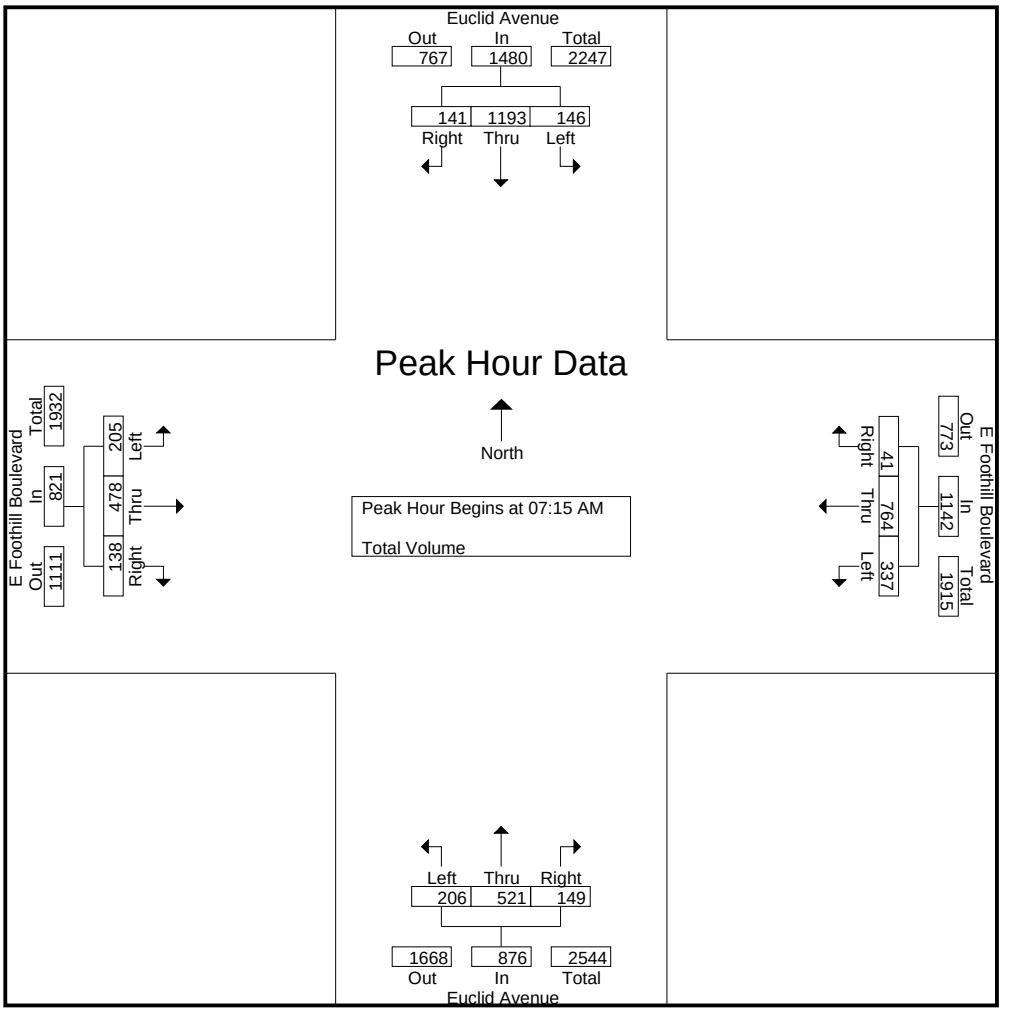
	Euclid Avenue Southbound				E Foothill Boulevard Westbound				Euclid Avenue Northbound				E Foothill Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	211	26	264	53	87	12	152	36	84	32	152	12	50	25	87	655
07:15 AM	24	329	44	397	110	148	8	266	35	112	35	182	42	88	31	161	1006
07:30 AM	33	334	33	400	89	218	15	322	31	153	35	219	79	135	40	254	1195
07:45 AM	50	307	34	391	73	218	11	302	78	141	52	271	55	165	39	259	1223
Total	134	1181	137	1452	325	671	46	1042	180	490	154	824	188	438	135	761	4079
08:00 AM	39	223	30	292	65	180	7	252	62	115	27	204	29	90	28	147	895
08:15 AM	24	213	23	260	61	168	17	246	68	113	28	209	16	106	29	151	866
08:30 AM	35	220	28	283	52	164	8	224	59	82	51	192	18	113	18	149	848
08:45 AM	34	215	37	286	60	155	21	236	62	89	36	187	19	95	32	146	855
Total	132	871	118	1121	238	667	53	958	251	399	142	792	82	404	107	593	3464
Grand Total	266	2052	255	2573	563	1338	99	2000	431	889	296	1616	270	842	242	1354	7543
Apprch %	10.3	79.8	9.9		28.1	66.9	4.9		26.7	55	18.3		19.9	62.2	17.9		
Total %	3.5	27.2	3.4	34.1	7.5	17.7	1.3	26.5	5.7	11.8	3.9	21.4	3.6	11.2	3.2	18	

	Euclid Avenue Southbound				E Foothill Boulevard Westbound				Euclid Avenue Northbound				E Foothill Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	24	329	**44**	397	**110**	148	8	266	35	112	35	182	42	88	31	161	1006
07:30 AM	33	**334**	33	**400**	89	**218**	**15**	**322**	31	**153**	35	219	**79**	135	**40**	254	1195
07:45 AM	**50**	307	34	391	73	218	11	302	**78**	141	**52**	**271**	55	**165**	39	**259**	**1223**
08:00 AM	39	223	30	292	65	180	7	252	62	115	27	204	29	90	28	147	895
Total Volume	146	1193	141	1480	337	764	41	1142	206	521	149	876	205	478	138	821	4319
% App. Total	9.9	80.6	9.5		29.5	66.9	3.6		23.5	59.5	17		25	58.2	16.8		
PHF	.730	.893	.801	.925	.766	.876	.683	.887	.660	.851	.716	.808	.649	.724	.863	.792	.883

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: E Foothill Boulevard
Weather: Sunny

File Name : UPEUFOAM
Site Code : 03922433
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	24	329	**44**	397	**110**	148	8	266	31	**153**	35	219	42	88	31	161
+15 mins.	33	**334**	33	**400**	89	**218**	**15**	**322**	**78**	141	**52**	**271**	**79**	135	**40**	254
+30 mins.	**50**	307	34	391	73	218	11	302	62	115	27	204	55	**165**	39	**259**
+45 mins.	39	223	30	292	65	180	7	252	68	113	28	209	29	90	28	147
Total Volume	146	1193	141	1480	337	764	41	1142	239	522	142	903	205	478	138	821
% App. Total	9.9	80.6	9.5		29.5	66.9	3.6		26.5	57.8	15.7		25	58.2	16.8	
PHF	.730	.893	.801	.925	.766	.876	.683	.887	.766	.853	.683	.833	.649	.724	.863	.792

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: E Foothill Boulevard
Weather: Sunny

File Name : UPEUFOPM
Site Code : 03922433
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

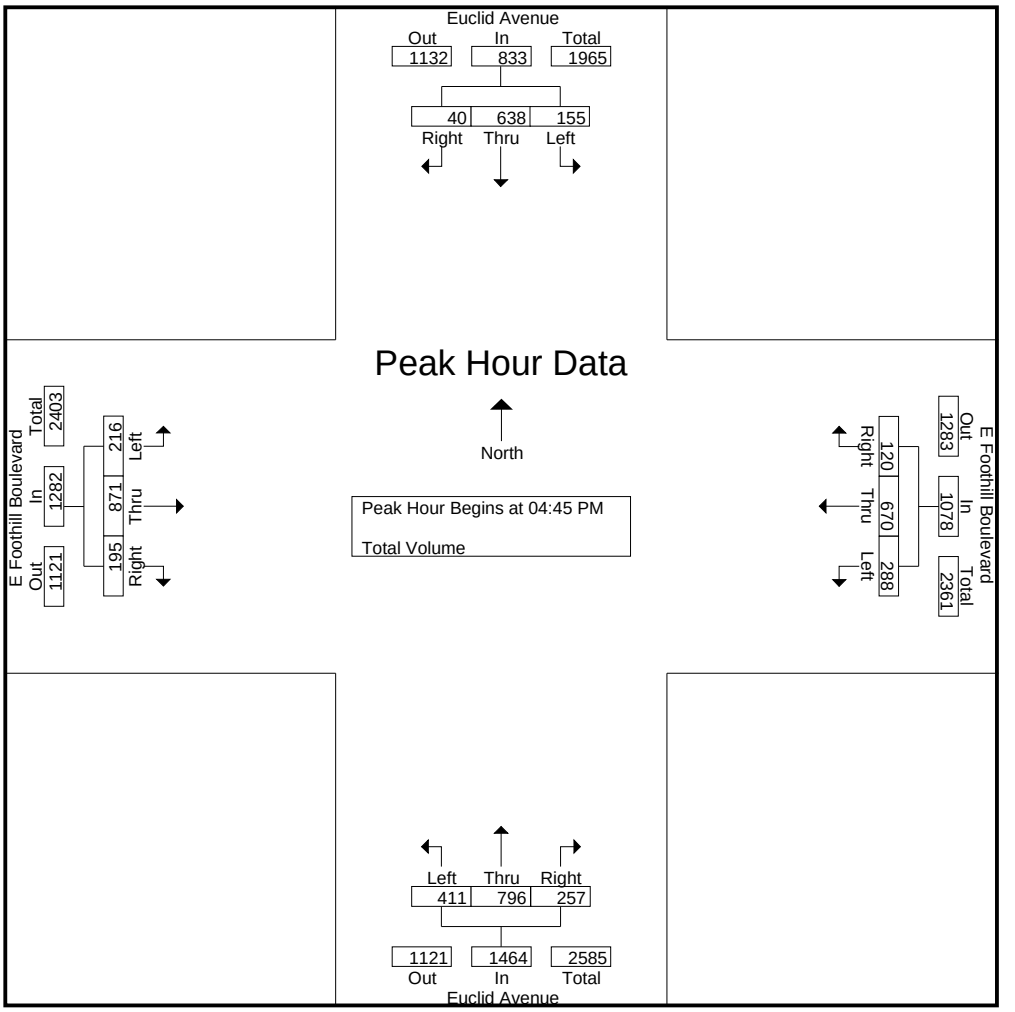
	Euclid Avenue Southbound				E Foothill Boulevard Westbound				Euclid Avenue Northbound				E Foothill Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	172	13	225	87	135	12	234	84	144	39	267	58	173	38	269	995
04:15 PM	43	186	13	242	65	158	29	252	84	169	59	312	66	198	36	300	1106
04:30 PM	32	144	8	184	62	184	27	273	91	197	62	350	61	204	56	321	1128
04:45 PM	42	169	5	216	72	163	27	262	100	206	88	394	53	168	36	257	1129
Total	157	671	39	867	286	640	95	1021	359	716	248	1323	238	743	166	1147	4358
05:00 PM	47	176	8	231	74	173	36	283	97	178	61	336	53	243	62	358	1208
05:15 PM	29	129	9	167	77	170	31	278	102	204	40	346	49	251	53	353	1144
05:30 PM	37	164	18	219	65	164	26	255	112	208	68	388	61	209	44	314	1176
05:45 PM	37	169	16	222	44	189	22	255	70	195	73	338	43	197	61	301	1116
Total	150	638	51	839	260	696	115	1071	381	785	242	1408	206	900	220	1326	4644
Grand Total	307	1309	90	1706	546	1336	210	2092	740	1501	490	2731	444	1643	386	2473	9002
Apprch %	18	76.7	5.3		26.1	63.9	10		27.1	55	17.9		18	66.4	15.6		
Total %	3.4	14.5	1	19	6.1	14.8	2.3	23.2	8.2	16.7	5.4	30.3	4.9	18.3	4.3	27.5	

	Euclid Avenue Southbound				E Foothill Boulevard Westbound				Euclid Avenue Northbound				E Foothill Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	42	169	5	216	72	163	27	262	100	206	**88**	**394**	53	168	36	257	1129
05:00 PM	**47**	**176**	8	**231**	74	**173**	**36**	**283**	97	178	61	336	53	243	**62**	**358**	**1208**
05:15 PM	29	129	9	167	**77**	170	31	278	102	204	40	346	49	**251**	53	353	1144
05:30 PM	37	164	**18**	219	65	164	26	255	**112**	**208**	68	388	**61**	209	44	314	1176
Total Volume	155	638	40	833	288	670	120	1078	411	796	257	1464	216	871	195	1282	4657
% App. Total	18.6	76.6	4.8		26.7	62.2	11.1		28.1	54.4	17.6		16.8	67.9	15.2		
PHF	.824	.906	.556	.902	.935	.968	.833	.952	.917	.957	.730	.929	.885	.868	.786	.895	.964

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: E Foothill Boulevard
Weather: Sunny

File Name : UPEUFOPM
Site Code : 03922433
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	43	**186**	**13**	**242**	62	**184**	27	273	100	206	**88**	**394**	53	243	**62**	**358**
+15 mins.	32	144	8	184	72	163	27	262	97	178	61	336	49	**251**	53	353
+30 mins.	42	169	5	216	74	173	**36**	**283**	102	204	40	346	**61**	209	44	314
+45 mins.	**47**	176	8	231	**77**	170	31	278	**112**	**208**	68	388	43	197	61	301
Total Volume	164	675	34	873	285	690	121	1096	411	796	257	1464	206	900	220	1326
% App. Total	18.8	77.3	3.9		26	63	11		28.1	54.4	17.6		15.5	67.9	16.6	
PHF	.872	.907	.654	.902	.925	.938	.840	.968	.917	.957	.730	.929	.844	.896	.887	.926

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UPEUARAM
Site Code : 03922491
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

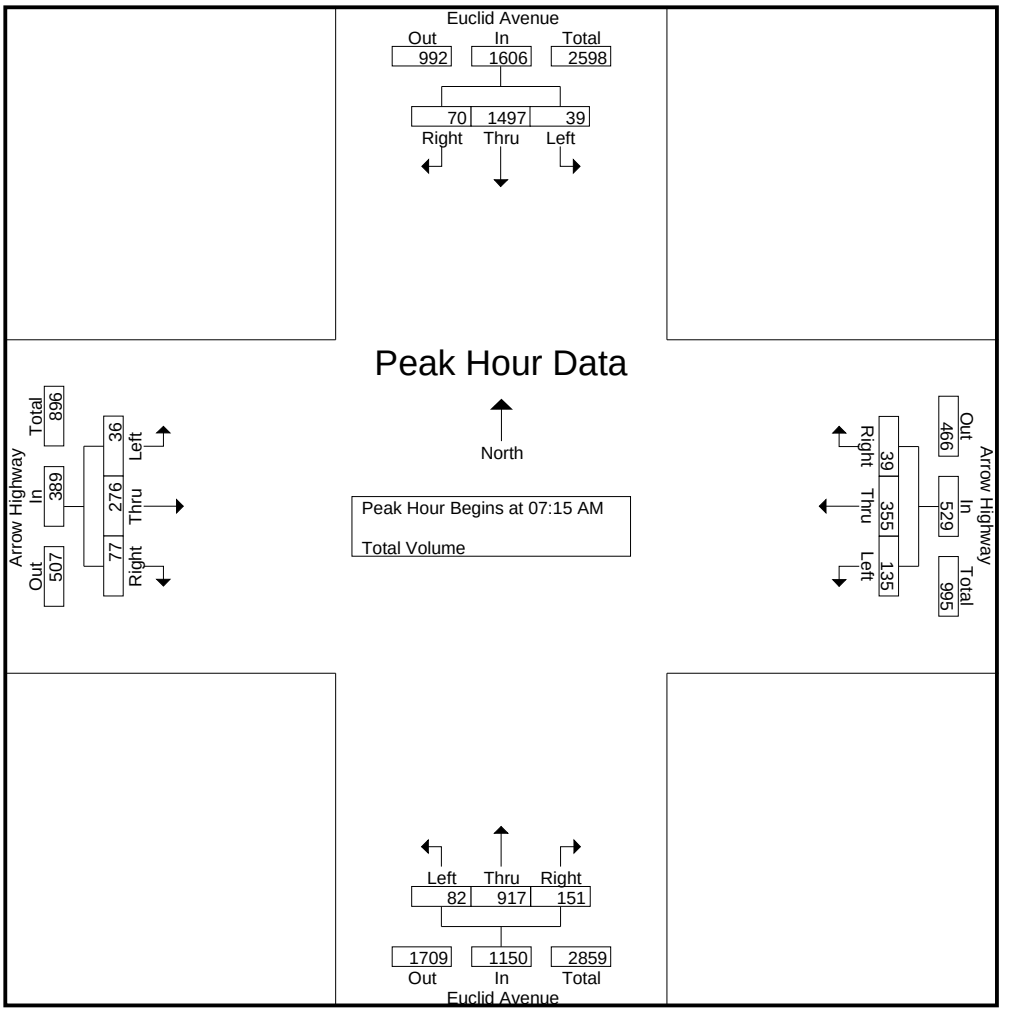
	Euclid Avenue Southbound				Arrow Highway Westbound				Euclid Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	256	7	272	20	38	13	71	3	156	25	184	4	36	17	57	584
07:15 AM	9	370	6	385	32	58	14	104	15	202	34	251	6	58	12	76	816
07:30 AM	14	403	22	439	38	120	7	165	39	253	35	327	10	83	31	124	1055
07:45 AM	10	387	25	422	36	117	5	158	14	257	44	315	11	86	27	124	1019
Total	42	1416	60	1518	126	333	39	498	71	868	138	1077	31	263	87	381	3474
08:00 AM	6	337	17	360	29	60	13	102	14	205	38	257	9	49	7	65	784
08:15 AM	9	251	17	277	34	68	11	113	21	219	52	292	0	53	12	65	747
08:30 AM	16	245	13	274	25	63	10	98	14	191	34	239	3	47	17	67	678
08:45 AM	22	249	8	279	30	51	14	95	10	190	38	238	6	35	10	51	663
Total	53	1082	55	1190	118	242	48	408	59	805	162	1026	18	184	46	248	2872
Grand Total	95	2498	115	2708	244	575	87	906	130	1673	300	2103	49	447	133	629	6346
Apprch %	3.5	92.2	4.2		26.9	63.5	9.6		6.2	79.6	14.3		7.8	71.1	21.1		
Total %	1.5	39.4	1.8	42.7	3.8	9.1	1.4	14.3	2	26.4	4.7	33.1	0.8	7	2.1	9.9	

	Euclid Avenue Southbound				Arrow Highway Westbound				Euclid Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	9	370	6	385	32	58	**14**	104	15	202	34	251	6	58	12	76	816
07:30 AM	**14**	**403**	22	**439**	**38**	**120**	7	**165**	**39**	253	35	**327**	10	83	**31**	**124**	**1055**
07:45 AM	10	387	**25**	422	36	117	5	158	14	**257**	**44**	315	**11**	**86**	27	124	1019
08:00 AM	6	337	17	360	29	60	13	102	14	205	38	257	9	49	7	65	784
Total Volume	39	1497	70	1606	135	355	39	529	82	917	151	1150	36	276	77	389	3674
% App. Total	2.4	93.2	4.4		25.5	67.1	7.4		7.1	79.7	13.1		9.3	71	19.8		
PHF	.696	.929	.700	.915	.888	.740	.696	.802	.526	.892	.858	.879	.818	.802	.621	.784	.871

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UPEUARAM
Site Code : 03922491
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:15 AM			
+0 mins.	9	370	6	385	**38**	**120**	7	**165**	**39**	253	35	**327**	6	58	12	76
+15 mins.	**14**	**403**	22	**439**	36	117	5	158	14	**257**	44	315	10	83	**31**	**124**
+30 mins.	10	387	**25**	422	29	60	**13**	102	14	205	38	257	**11**	**86**	27	124
+45 mins.	6	337	17	360	34	68	11	113	21	219	**52**	292	9	49	7	65
Total Volume	39	1497	70	1606	137	365	36	538	88	934	169	1191	36	276	77	389
% App. Total	2.4	93.2	4.4		25.5	67.8	6.7		7.4	78.4	14.2		9.3	71	19.8	
PHF	.696	.929	.700	.915	.901	.760	.692	.815	.564	.909	.813	.911	.818	.802	.621	.784

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UPEUARPM
Site Code : 03922493
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

	Euclid Avenue Southbound				Arrow Highway Westbound				Euclid Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	267	12	293	40	62	18	120	17	324	54	395	2	82	21	105	913
04:15 PM	15	215	13	243	42	65	30	137	17	347	28	392	3	57	14	74	846
04:30 PM	22	263	10	295	36	60	29	125	13	353	42	408	4	84	15	103	931
04:45 PM	13	253	24	290	40	65	28	133	14	352	57	423	2	94	20	116	962
Total	64	998	59	1121	158	252	105	515	61	1376	181	1618	11	317	70	398	3652
05:00 PM	11	296	16	323	30	81	24	135	12	341	37	390	4	104	24	132	980
05:15 PM	12	250	18	280	38	85	15	138	15	385	35	435	18	99	20	137	990
05:30 PM	14	253	15	282	27	67	14	108	12	354	41	407	7	84	15	106	903
05:45 PM	19	260	14	293	32	50	25	107	16	353	42	411	14	79	13	106	917
Total	56	1059	63	1178	127	283	78	488	55	1433	155	1643	43	366	72	481	3790
Grand Total	120	2057	122	2299	285	535	183	1003	116	2809	336	3261	54	683	142	879	7442
Apprch %	5.2	89.5	5.3		28.4	53.3	18.2		3.6	86.1	10.3		6.1	77.7	16.2		
Total %	1.6	27.6	1.6	30.9	3.8	7.2	2.5	13.5	1.6	37.7	4.5	43.8	0.7	9.2	1.9	11.8	

	Euclid Avenue Southbound				Arrow Highway Westbound				Euclid Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**22**	263	10	295	36	60	**29**	125	13	353	42	408	4	84	15	103	931
04:45 PM	13	253	**24**	290	**40**	65	28	133	14	352	**57**	423	2	94	20	116	962
05:00 PM	11	**296**	16	**323**	30	81	24	135	12	341	37	390	4	**104**	**24**	132	980
05:15 PM	12	250	18	280	38	**85**	15	**138**	**15**	**385**	35	**435**	**18**	99	20	**137**	**990**
Total Volume	58	1062	68	1188	144	291	96	531	54	1431	171	1656	28	381	79	488	3863
% App. Total	4.9	89.4	5.7		27.1	54.8	18.1		3.3	86.4	10.3		5.7	78.1	16.2		
PHF	.659	.897	.708	.920	.900	.856	.828	.962	.900	.929	.750	.952	.389	.916	.823	.891	.976

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UPEUARPM
Site Code : 03922493
Start Date : 6/4/2008
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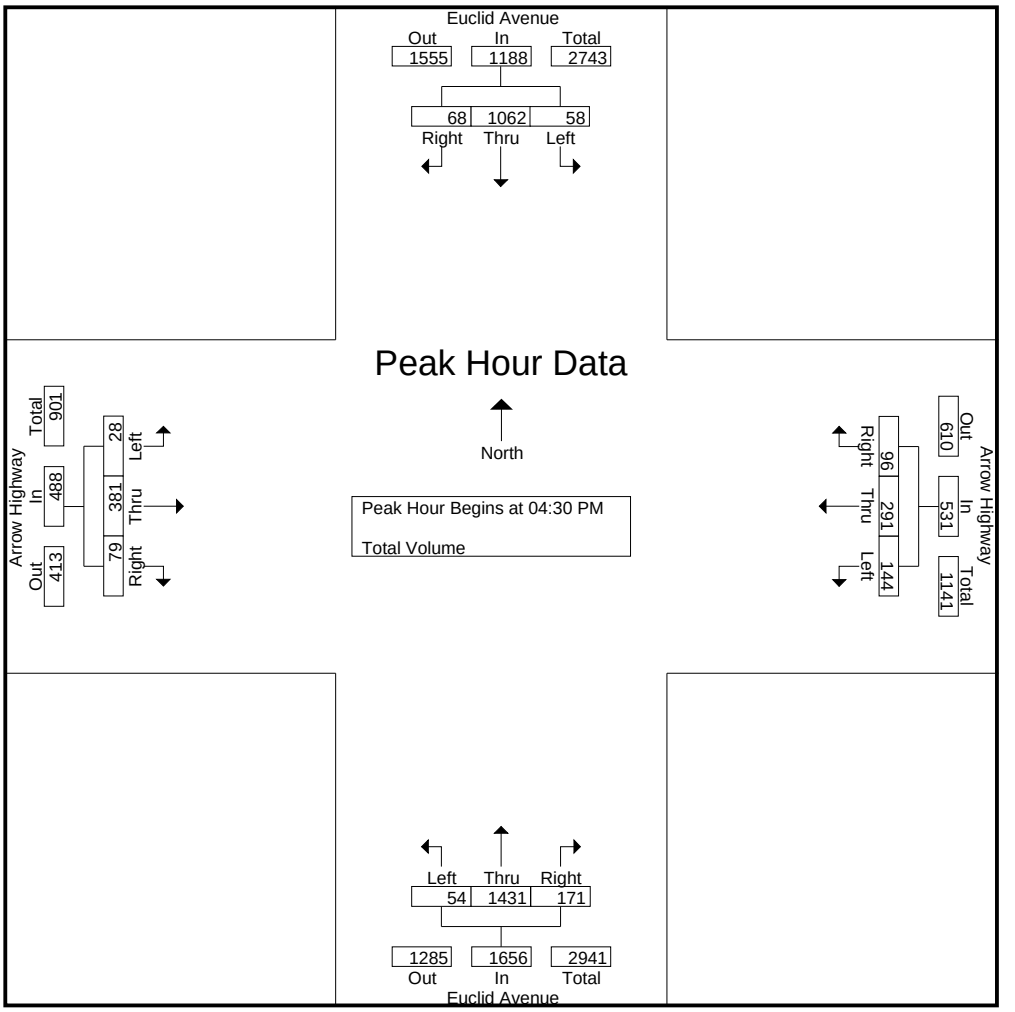

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:45 PM			
+0 mins.	**22**	263	10	295	36	60	**29**	125	13	353	42	408	2	94	20	116
+15 mins.	13	253	**24**	290	**40**	65	28	133	14	352	**57**	423	4	**104**	**24**	132
+30 mins.	11	**296**	16	**323**	30	81	24	135	12	341	37	390	**18**	99	20	**137**
+45 mins.	12	250	18	280	38	**85**	15	**138**	**15**	**385**	35	**435**	7	84	15	106
Total Volume	58	1062	68	1188	144	291	96	531	54	1431	171	1656	31	381	79	491
% App. Total	4.9	89.4	5.7		27.1	54.8	18.1		3.3	86.4	10.3		6.3	77.6	16.1	
PHF	.659	.897	.708	.920	.900	.856	.828	.962	.900	.929	.750	.952	.431	.916	.823	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: I-10 Eastbound On/Off Ramps
Weather: Sunny

File Name : UPEU10EAM
Site Code : 03922466
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

	Euclid Avenue Southbound				I-10 Eastbound On Ramp Westbound				Euclid Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	117	136	0	253	0	0	0	0	0	184	61	245	78	1	50	129	627
07:15 AM	136	247	0	383	0	0	0	0	0	243	72	315	126	0	65	191	889
07:30 AM	174	272	0	446	0	0	0	0	0	237	100	337	105	0	64	169	952
07:45 AM	161	226	0	387	0	0	0	0	0	301	132	433	121	0	62	183	1003
Total	588	881	0	1469	0	0	0	0	0	965	365	1330	430	1	241	672	3471
08:00 AM	150	194	0	344	0	0	0	0	0	211	75	286	108	0	63	171	801
08:15 AM	102	176	0	278	0	0	0	0	0	227	50	277	135	0	63	198	753
08:30 AM	113	166	0	279	0	0	0	0	0	180	57	237	107	0	65	172	688
08:45 AM	89	161	0	250	0	0	0	0	0	190	58	248	116	0	69	185	683
Total	454	697	0	1151	0	0	0	0	0	808	240	1048	466	0	260	726	2925
Grand Total	1042	1578	0	2620	0	0	0	0	0	1773	605	2378	896	1	501	1398	6396
Apprch %	39.8	60.2	0		0	0	0		0	74.6	25.4		64.1	0.1	35.8		
Total %	16.3	24.7	0	41	0	0	0	0	0	27.7	9.5	37.2	14	0	7.8	21.9	

	Euclid Avenue Southbound				I-10 Eastbound On Ramp Westbound				Euclid Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	136	247	0	383	0	0	0	0	0	243	72	315	**126**	0	**65**	**191**	889
07:30 AM	**174**	**272**	0	**446**	0	0	0	0	0	237	100	337	105	0	64	169	952
07:45 AM	161	226	0	387	0	0	0	0	0	**301**	**132**	**433**	121	0	62	183	**1003**
08:00 AM	150	194	0	344	0	0	0	0	0	211	75	286	108	0	63	171	801
Total Volume	621	939	0	1560	0	0	0	0	0	992	379	1371	460	0	254	714	3645
% App. Total	39.8	60.2	0		0	0	0		0	72.4	27.6		64.4	0	35.6		
PHF	.892	.863	.000	.874	.000	.000	.000	.000	.000	.824	.718	.792	.913	.000	.977	.935	.909

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: I-10 Eastbound On/Off Ramps
Weather: Sunny

File Name : UPEU10EAM
Site Code : 03922466
Start Date : 6/4/2008
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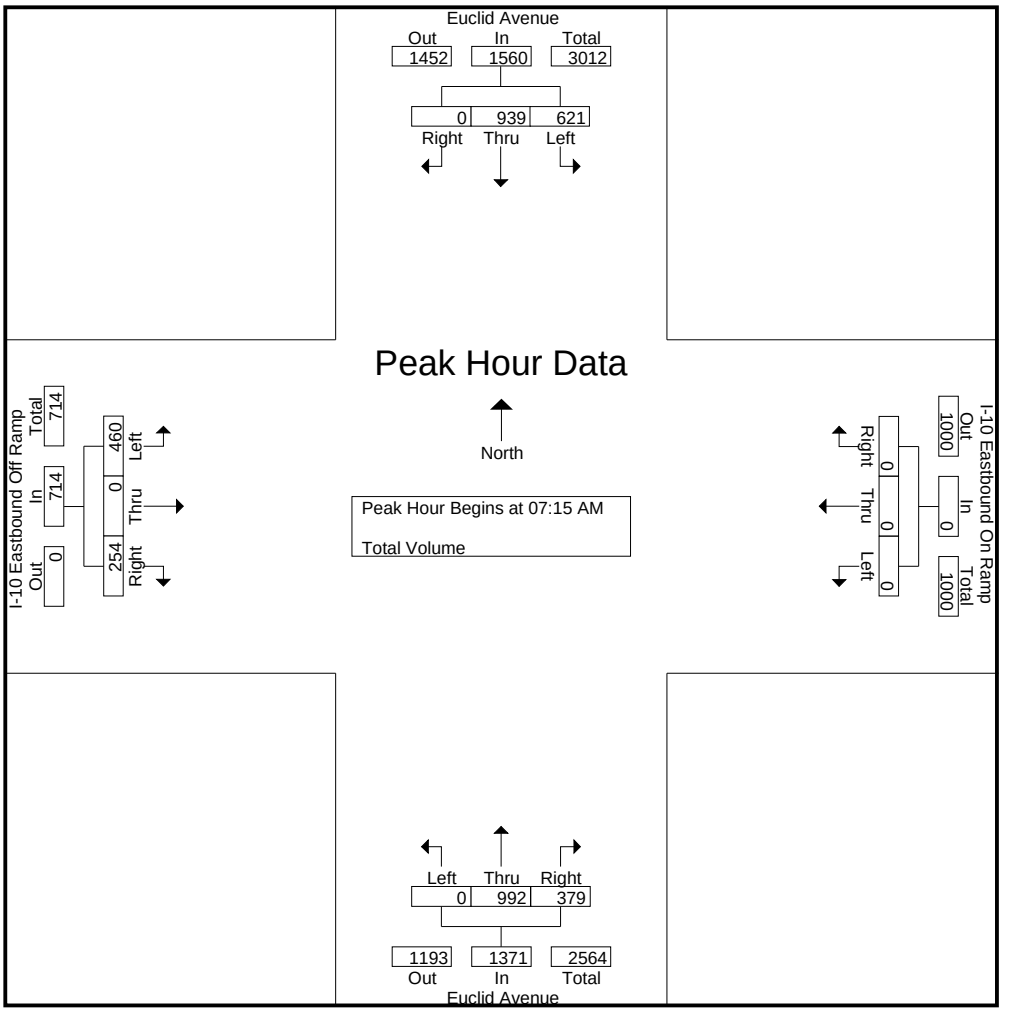


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				08:00 AM			
+0 mins.	136	247	0	383	0	0	0	0	0	243	72	315	108	0	63	171
+15 mins.	**174**	**272**	0	**446**	0	0	0	0	0	237	100	337	**135**	0	63	**198**
+30 mins.	161	226	0	387	0	0	0	0	0	**301**	**132**	**433**	107	0	65	172
+45 mins.	150	194	0	344	0	0	0	0	0	211	75	286	116	0	**69**	185
Total Volume	621	939	0	1560	0	0	0	0	0	992	379	1371	466	0	260	726
% App. Total	39.8	60.2	0		0	0	0		0	72.4	27.6		64.2	0	35.8	
PHF	.892	.863	.000	.874	.000	.000	.000	.000	.000	.824	.718	.792	.863	.000	.942	.917

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: I-10 Eastbound On/Off Ramps
Weather: Sunny

File Name : UPEU10EPM
Site Code : 03922466
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

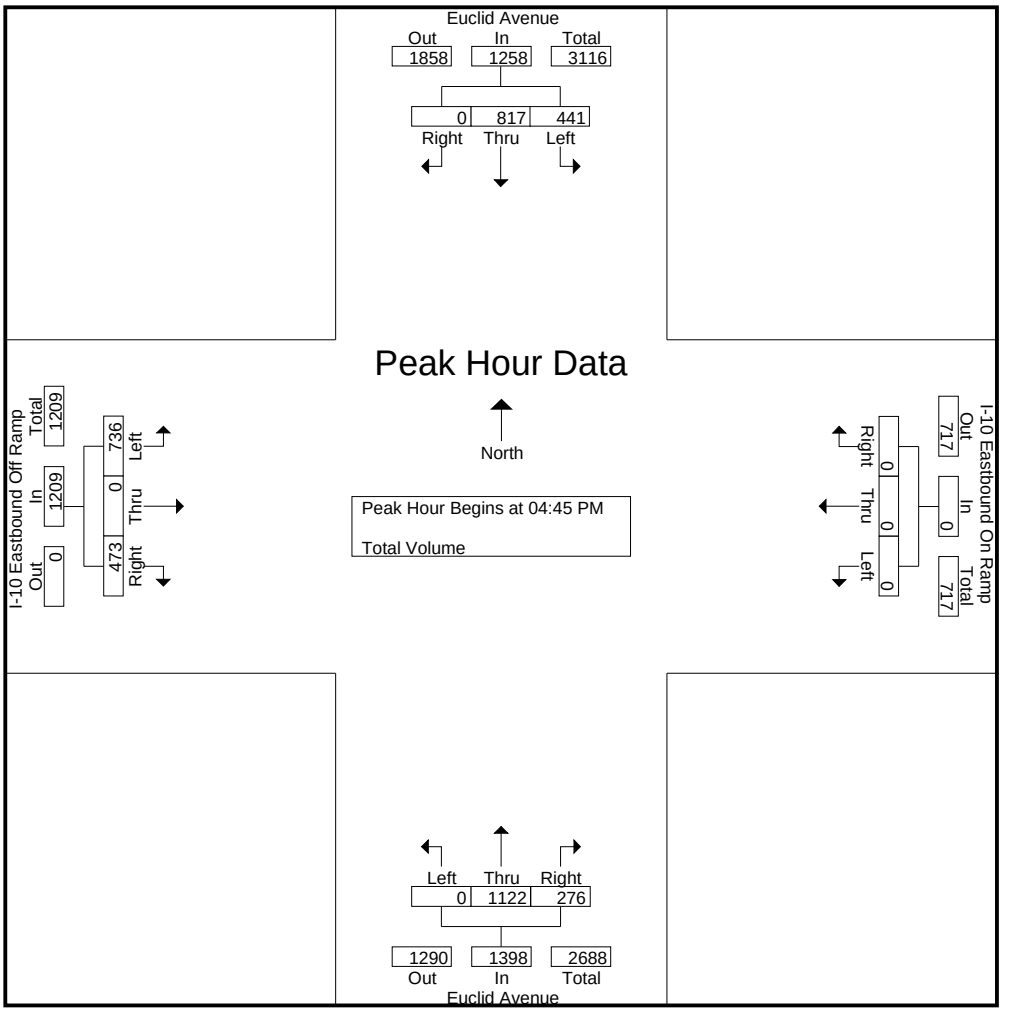
	Euclid Avenue Southbound				I-10 Eastbound On Ramp Westbound				Euclid Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	108	209	0	317	0	0	0	0	0	267	78	345	156	1	117	274	936
04:15 PM	88	185	0	273	0	0	0	0	0	282	98	380	180	0	129	309	962
04:30 PM	105	217	0	322	0	0	0	0	0	249	76	325	153	0	132	285	932
04:45 PM	102	195	0	297	0	0	0	0	0	261	59	320	197	0	128	325	942
Total	403	806	0	1209	0	0	0	0	0	1059	311	1370	686	1	506	1193	3772
05:00 PM	110	222	0	332	0	0	0	0	0	289	73	362	160	0	107	267	961
05:15 PM	95	210	0	305	0	0	0	0	0	299	66	365	208	0	128	336	1006
05:30 PM	134	190	0	324	0	0	0	0	0	273	78	351	171	0	110	281	956
05:45 PM	88	186	0	274	0	0	0	0	0	267	75	342	185	0	128	313	929
Total	427	808	0	1235	0	0	0	0	0	1128	292	1420	724	0	473	1197	3852
Grand Total	830	1614	0	2444	0	0	0	0	0	2187	603	2790	1410	1	979	2390	7624
Apprch %	34	66	0		0	0	0		0	78.4	21.6		59	0	41		
Total %	10.9	21.2	0	32.1	0	0	0	0	0	28.7	7.9	36.6	18.5	0	12.8	31.3	

	Euclid Avenue Southbound				I-10 Eastbound On Ramp Westbound				Euclid Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	102	195	0	297	0	0	0	0	0	261	59	320	197	0	**128**	325	942
05:00 PM	110	**222**	0	**332**	0	0	0	0	0	289	73	362	160	0	107	267	961
05:15 PM	95	210	0	305	0	0	0	0	0	**299**	66	**365**	**208**	0	128	**336**	**1006**
05:30 PM	**134**	190	0	324	0	0	0	0	0	273	**78**	351	171	0	110	281	956
Total Volume	441	817	0	1258	0	0	0	0	0	1122	276	1398	736	0	473	1209	3865
% App. Total	35.1	64.9	0		0	0	0		0	80.3	19.7		60.9	0	39.1		
PHF	.823	.920	.000	.947	.000	.000	.000	.000	.000	.938	.885	.958	.885	.000	.924	.900	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: I-10 Eastbound On/Off Ramps
Weather: Sunny

File Name : UPEU10EPM
Site Code : 03922466
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				05:00 PM				04:30 PM			
+0 mins.	102	195	0	297	0	0	0	0	0	289	73	362	153	0	**132**	285
+15 mins.	110	**222**	0	**332**	0	0	0	0	0	**299**	66	**365**	197	0	128	325
+30 mins.	95	210	0	305	0	0	0	0	0	273	**78**	351	160	0	107	267
+45 mins.	**134**	190	0	324	0	0	0	0	0	267	75	342	**208**	0	128	**336**
Total Volume	441	817	0	1258	0	0	0	0	0	1128	292	1420	718	0	495	1213
% App. Total	35.1	64.9	0		0	0	0		0	79.4	20.6		59.2	0	40.8	
PHF	.823	.920	.000	.947	.000	.000	.000	.000	.000	.943	.936	.973	.863	.000	.938	.903

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPEU9AM
Site Code : 03922434
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

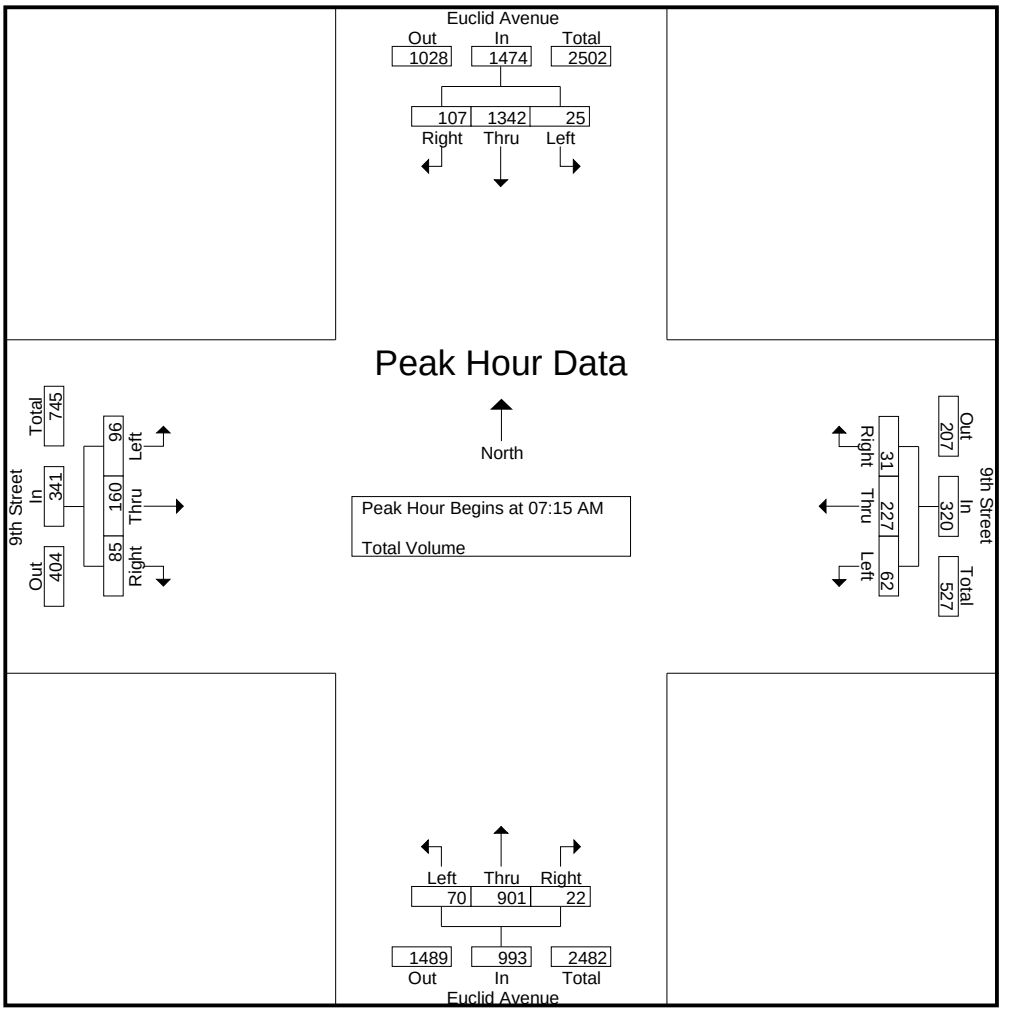
	Euclid Avenue Southbound				9th Street Westbound				Euclid Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	258	13	277	14	19	5	38	15	179	2	196	5	10	13	28	539
07:15 AM	5	369	19	393	21	34	7	62	14	231	5	250	13	22	15	50	755
07:30 AM	6	370	20	396	13	63	14	90	15	252	0	267	25	37	26	88	841
07:45 AM	9	352	42	403	10	70	6	86	13	226	10	249	33	58	22	113	851
Total	26	1349	94	1469	58	186	32	276	57	888	17	962	76	127	76	279	2986
08:00 AM	5	251	26	282	18	60	4	82	28	192	7	227	25	43	22	90	681
08:15 AM	5	263	17	285	14	26	4	44	20	250	6	276	25	21	26	72	677
08:30 AM	7	211	11	229	21	37	6	64	13	210	9	232	18	24	10	52	577
08:45 AM	6	234	15	255	18	32	8	58	14	192	16	222	12	28	19	59	594
Total	23	959	69	1051	71	155	22	248	75	844	38	957	80	116	77	273	2529
Grand Total	49	2308	163	2520	129	341	54	524	132	1732	55	1919	156	243	153	552	5515
Apprch %	1.9	91.6	6.5		24.6	65.1	10.3		6.9	90.3	2.9		28.3	44	27.7		
Total %	0.9	41.8	3	45.7	2.3	6.2	1	9.5	2.4	31.4	1	34.8	2.8	4.4	2.8	10	

	Euclid Avenue Southbound				9th Street Westbound				Euclid Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	369	19	393	**21**	34	7	62	14	231	5	250	13	22	15	50	755
07:30 AM	6	**370**	20	396	13	63	**14**	**90**	15	**252**	0	**267**	25	37	**26**	88	841
07:45 AM	**9**	352	**42**	**403**	10	**70**	6	86	13	226	**10**	249	**33**	**58**	22	**113**	**851**
08:00 AM	5	251	26	282	18	60	4	82	**28**	192	7	227	25	43	22	90	681
Total Volume	25	1342	107	1474	62	227	31	320	70	901	22	993	96	160	85	341	3128
% App. Total	1.7	91	7.3		19.4	70.9	9.7		7	90.7	2.2		28.2	46.9	24.9		
PHF	.694	.907	.637	.914	.738	.811	.554	.889	.625	.894	.550	.930	.727	.690	.817	.754	.919

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPEU9AM
Site Code : 03922434
Start Date : 6/4/2008



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	5	369	19	393	**21**	34	7	62	15	**252**	0	267	25	37	**26**	88
+15 mins.	6	**370**	20	396	13	63	**14**	**90**	13	226	**10**	249	**33**	**58**	22	**113**
+30 mins.	**9**	352	**42**	**403**	10	**70**	6	86	**28**	192	7	227	25	43	22	90
+45 mins.	5	251	26	282	18	60	4	82	20	250	6	**276**	25	21	26	72
Total Volume	25	1342	107	1474	62	227	31	320	76	920	23	1019	108	159	96	363
% App. Total	1.7	91	7.3		19.4	70.9	9.7		7.5	90.3	2.3		29.8	43.8	26.4	
PHF	.694	.907	.637	.914	.738	.811	.554	.889	.679	.913	.575	.923	.818	.685	.923	.803

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPEU9PM
Site Code : 03922434
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

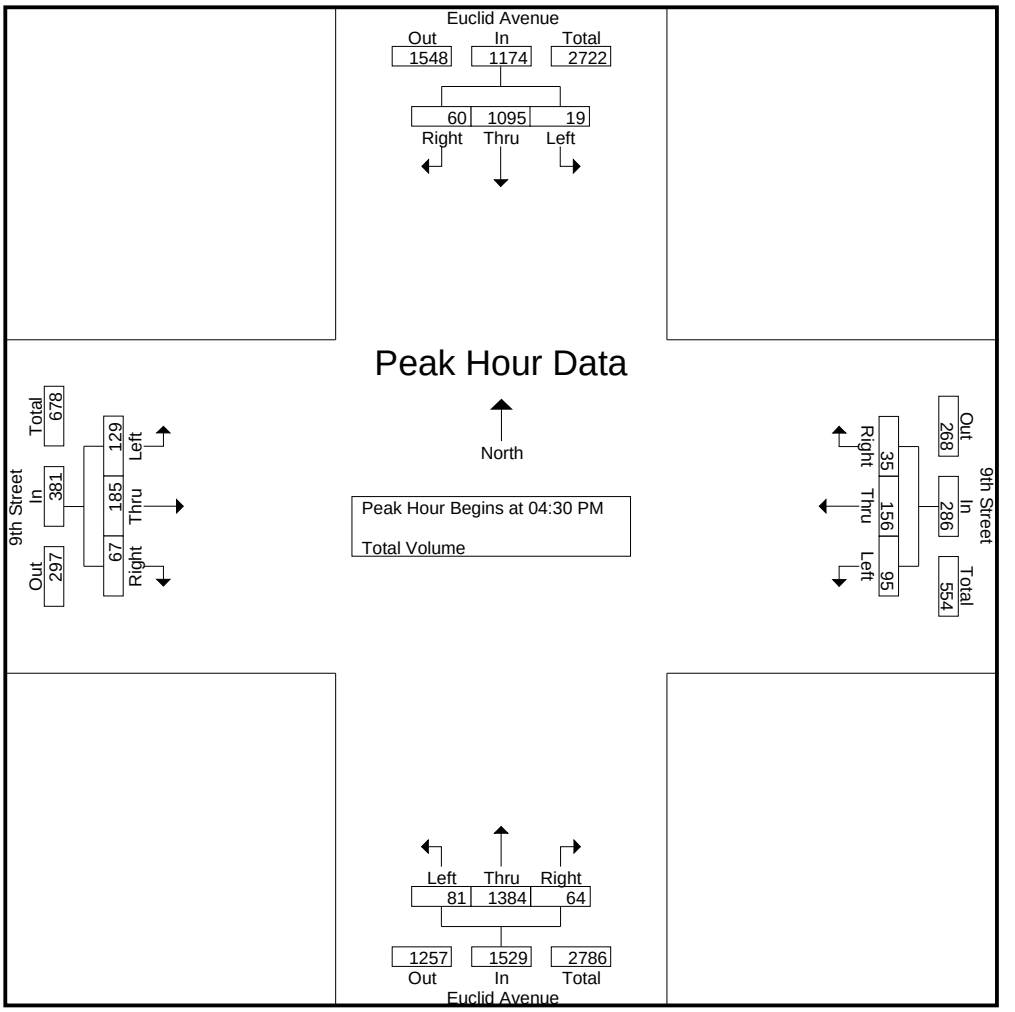
	Euclid Avenue Southbound				9th Street Westbound				Euclid Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	277	15	302	25	39	12	76	13	339	14	366	30	51	12	93	837
04:15 PM	11	243	11	265	27	48	15	90	11	278	19	308	23	38	24	85	748
04:30 PM	8	249	21	278	20	41	9	70	18	336	12	366	48	53	19	120	834
04:45 PM	4	282	15	301	22	35	4	61	22	355	12	389	26	40	24	90	841
Total	33	1051	62	1146	94	163	40	297	64	1308	57	1429	127	182	79	388	3260
05:00 PM	4	314	15	333	29	41	16	86	20	319	23	362	34	46	9	89	870
05:15 PM	3	250	9	262	24	39	6	69	21	374	17	412	21	46	15	82	825
05:30 PM	4	245	11	260	26	53	12	91	23	336	22	381	33	53	15	101	833
05:45 PM	5	274	7	286	22	35	10	67	13	363	19	395	22	50	16	88	836
Total	16	1083	42	1141	101	168	44	313	77	1392	81	1550	110	195	55	360	3364
Grand Total	49	2134	104	2287	195	331	84	610	141	2700	138	2979	237	377	134	748	6624
Apprch %	2.1	93.3	4.5		32	54.3	13.8		4.7	90.6	4.6		31.7	50.4	17.9		
Total %	0.7	32.2	1.6	34.5	2.9	5	1.3	9.2	2.1	40.8	2.1	45	3.6	5.7	2	11.3	

	Euclid Avenue Southbound				9th Street Westbound				Euclid Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**8**	249	**21**	278	20	**41**	9	70	18	336	12	366	**48**	**53**	19	**120**	834
04:45 PM	4	282	15	301	22	35	4	61	**22**	355	12	389	26	40	**24**	90	841
05:00 PM	4	**314**	15	**333**	**29**	41	**16**	**86**	20	319	**23**	362	34	46	9	89	**870**
05:15 PM	3	250	9	262	24	39	6	69	21	**374**	17	**412**	21	46	15	82	825
Total Volume	19	1095	60	1174	95	156	35	286	81	1384	64	1529	129	185	67	381	3370
% App. Total	1.6	93.3	5.1		33.2	54.5	12.2		5.3	90.5	4.2		33.9	48.6	17.6		
PHF	.594	.872	.714	.881	.819	.951	.547	.831	.920	.925	.696	.928	.672	.873	.698	.794	.968

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 9th Street
Weather: Sunny

File Name : UPEU9PM
Site Code : 03922434
Start Date : 6/4/2008



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	**11**	243	11	265	**29**	41	**16**	86	20	319	**23**	362	30	51	12	93
+15 mins.	8	249	**21**	278	24	39	6	69	21	**374**	17	**412**	23	38	**24**	85
+30 mins.	4	282	15	301	26	**53**	12	**91**	**23**	336	22	381	**48**	**53**	19	**120**
+45 mins.	4	**314**	15	**333**	22	35	10	67	13	363	19	395	26	40	24	90
Total Volume	27	1088	62	1177	101	168	44	313	77	1392	81	1550	127	182	79	388
% App. Total	2.3	92.4	5.3		32.3	53.7	14.1		5	89.8	5.2		32.7	46.9	20.4	
PHF	.614	.866	.738	.884	.871	.792	.688	.860	.837	.930	.880	.941	.661	.858	.823	.808

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPEU8AM
Site Code : 03922422
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

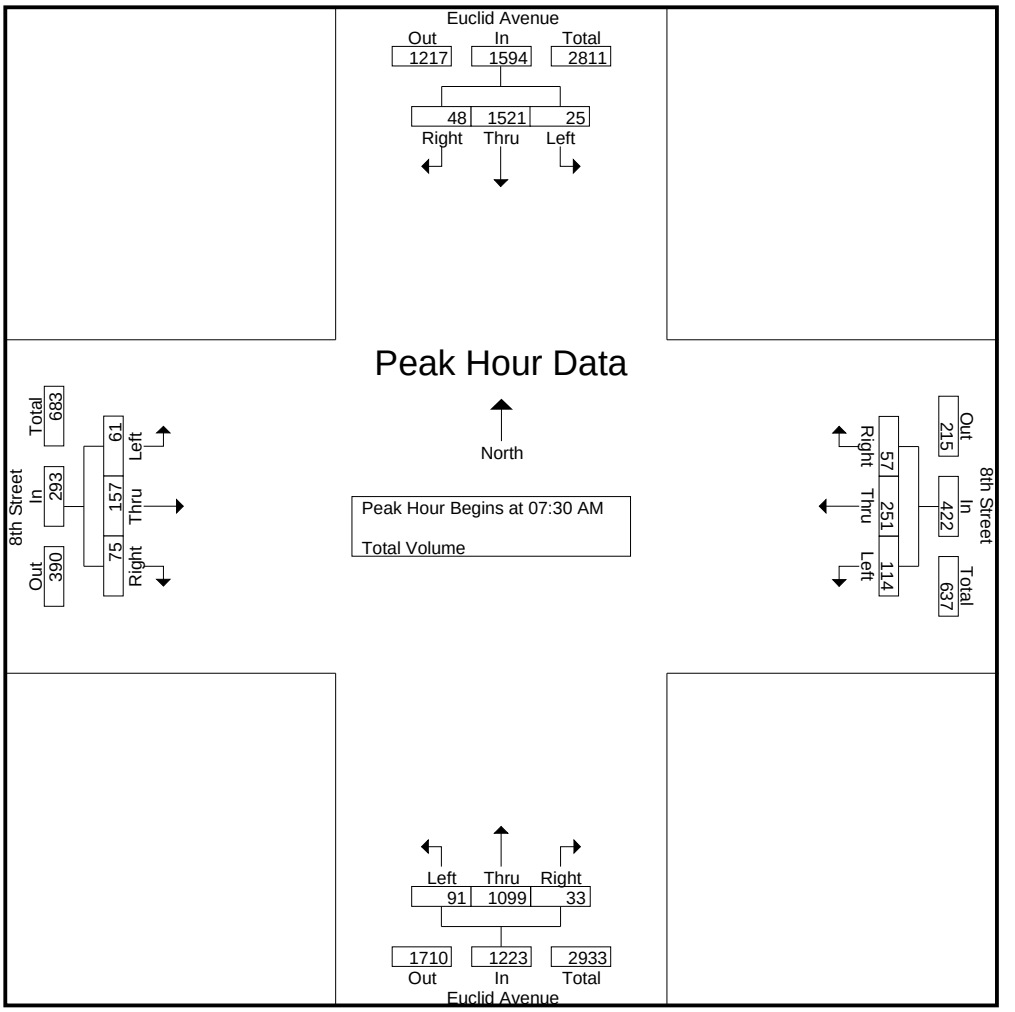
	Euclid Avenue Southbound				8th Street Westbound				Euclid Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	298	5	307	12	36	12	60	8	178	7	193	10	21	6	37	597
07:15 AM	9	366	5	380	35	39	13	87	8	254	6	268	11	36	17	64	799
07:30 AM	10	410	9	429	48	51	21	120	16	288	8	312	16	28	16	60	921
07:45 AM	6	445	14	465	35	68	12	115	17	267	5	289	19	46	16	81	950
Total	29	1519	33	1581	130	194	58	382	49	987	26	1062	56	131	55	242	3267
08:00 AM	5	374	14	393	21	74	10	105	20	257	9	286	16	29	20	65	849
08:15 AM	4	292	11	307	10	58	14	82	38	287	11	336	10	54	23	87	812
08:30 AM	7	306	14	327	15	68	8	91	23	225	9	257	17	51	13	81	756
08:45 AM	7	271	16	294	25	54	14	93	10	237	5	252	12	48	15	75	714
Total	23	1243	55	1321	71	254	46	371	91	1006	34	1131	55	182	71	308	3131
Grand Total	52	2762	88	2902	201	448	104	753	140	1993	60	2193	111	313	126	550	6398
Apprch %	1.8	95.2	3		26.7	59.5	13.8		6.4	90.9	2.7		20.2	56.9	22.9		
Total %	0.8	43.2	1.4	45.4	3.1	7	1.6	11.8	2.2	31.2	0.9	34.3	1.7	4.9	2	8.6	

	Euclid Avenue Southbound				8th Street Westbound				Euclid Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**10**	410	9	429	**48**	51	**21**	**120**	16	**288**	8	312	16	28	16	60	921
07:45 AM	6	**445**	**14**	**465**	35	68	12	115	17	267	5	289	**19**	46	16	81	**950**
08:00 AM	5	374	14	393	21	**74**	10	105	20	257	9	286	16	29	20	65	849
08:15 AM	4	292	11	307	10	58	14	82	**38**	287	**11**	**336**	10	**54**	**23**	**87**	812
Total Volume	25	1521	48	1594	114	251	57	422	91	1099	33	1223	61	157	75	293	3532
% App. Total	1.6	95.4	3		27	59.5	13.5		7.4	89.9	2.7		20.8	53.6	25.6		
PHF	.625	.854	.857	.857	.594	.848	.679	.879	.599	.954	.750	.910	.803	.727	.815	.842	.929

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPEU8AM
Site Code : 03922422
Start Date : 6/4/2008



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	9	366	5	380	35	39	13	87	16	**288**	8	312	**19**	46	16	81
+15 mins.	**10**	410	9	429	**48**	51	**21**	**120**	17	267	5	289	16	29	20	65
+30 mins.	6	**445**	**14**	**465**	35	68	12	115	20	257	9	286	10	**54**	**23**	**87**
+45 mins.	5	374	14	393	21	**74**	10	105	**38**	287	**11**	**336**	17	51	13	81
Total Volume	30	1595	42	1667	139	232	56	427	91	1099	33	1223	62	180	72	314
% App. Total	1.8	95.7	2.5		32.6	54.3	13.1		7.4	89.9	2.7		19.7	57.3	22.9	
PHF	.750	.896	.750	.896	.724	.784	.667	.890	.599	.954	.750	.910	.816	.833	.783	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPEU8PM
Site Code : 03922457
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

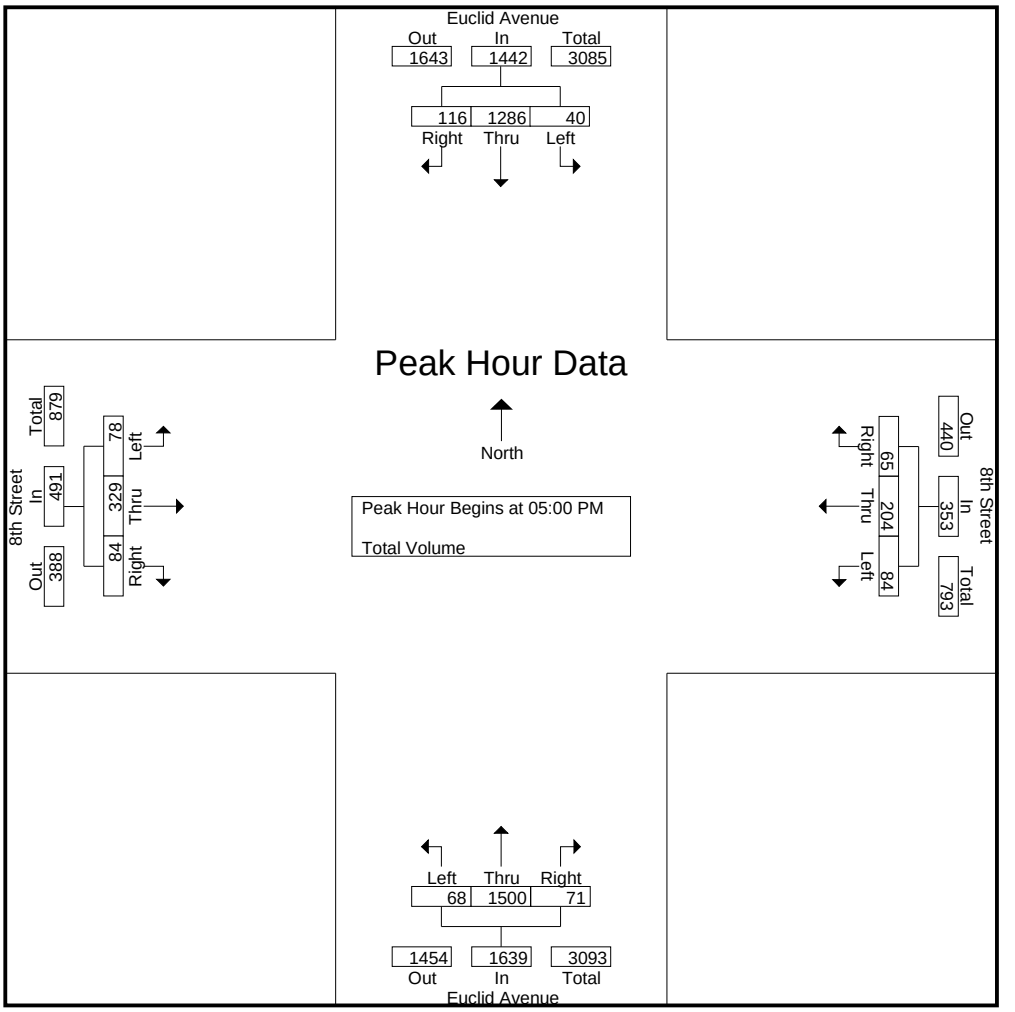
	Euclid Avenue Southbound				8th Street Westbound				Euclid Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	15	271	21	307	13	34	12	59	8	322	21	351	24	51	13	88	805
04:15 PM	9	286	27	322	20	62	11	93	18	345	10	373	13	57	11	81	869
04:30 PM	15	287	20	322	16	57	14	87	14	327	18	359	25	39	14	78	846
04:45 PM	13	341	26	380	17	48	21	86	15	366	24	405	22	60	18	100	971
Total	52	1185	94	1331	66	201	58	325	55	1360	73	1488	84	207	56	347	3491
05:00 PM	11	345	31	387	24	50	10	84	14	379	17	410	18	65	18	101	982
05:15 PM	14	329	30	373	17	64	22	103	13	388	15	416	25	114	18	157	1049
05:30 PM	6	290	30	326	27	49	14	90	14	353	17	384	16	68	22	106	906
05:45 PM	9	322	25	356	16	41	19	76	27	380	22	429	19	82	26	127	988
Total	40	1286	116	1442	84	204	65	353	68	1500	71	1639	78	329	84	491	3925
Grand Total	92	2471	210	2773	150	405	123	678	123	2860	144	3127	162	536	140	838	7416
Apprch %	3.3	89.1	7.6		22.1	59.7	18.1		3.9	91.5	4.6		19.3	64	16.7		
Total %	1.2	33.3	2.8	37.4	2	5.5	1.7	9.1	1.7	38.6	1.9	42.2	2.2	7.2	1.9	11.3	

	Euclid Avenue Southbound				8th Street Westbound				Euclid Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	11	**345**	**31**	**387**	24	50	10	84	14	379	17	410	18	65	18	101	982
05:15 PM	**14**	329	30	373	17	**64**	**22**	**103**	13	**388**	15	416	**25**	**114**	18	**157**	**1049**
05:30 PM	6	290	30	326	**27**	49	14	90	14	353	17	384	16	68	22	106	906
05:45 PM	9	322	25	356	16	41	19	76	**27**	380	**22**	**429**	19	82	**26**	127	988
Total Volume	40	1286	116	1442	84	204	65	353	68	1500	71	1639	78	329	84	491	3925
% App. Total	2.8	89.2	8		23.8	57.8	18.4		4.1	91.5	4.3		15.9	67	17.1		
PHF	.714	.932	.935	.932	.778	.797	.739	.857	.630	.966	.807	.955	.780	.721	.808	.782	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 8th Street
Weather: Sunny

File Name : UPEU8PM
Site Code : 03922457
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				05:00 PM				05:00 PM			
+0 mins.	13	341	26	380	17	48	21	86	14	379	17	410	18	65	18	101
+15 mins.	11	**345**	**31**	**387**	24	50	10	84	13	**388**	15	416	**25**	**114**	18	**157**
+30 mins.	**14**	329	30	373	17	**64**	**22**	**103**	14	353	17	384	16	68	22	106
+45 mins.	6	290	30	326	**27**	49	14	90	**27**	380	**22**	**429**	19	82	**26**	127
Total Volume	44	1305	117	1466	85	211	67	363	68	1500	71	1639	78	329	84	491
% App. Total	3	89	8		23.4	58.1	18.5		4.1	91.5	4.3		15.9	67	17.1	
PHF	.786	.946	.944	.947	.787	.824	.761	.881	.630	.966	.807	.955	.780	.721	.808	.782

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 7th Street
Weather: Sunny

File Name : UPEU7AM
Site Code : 03922463
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

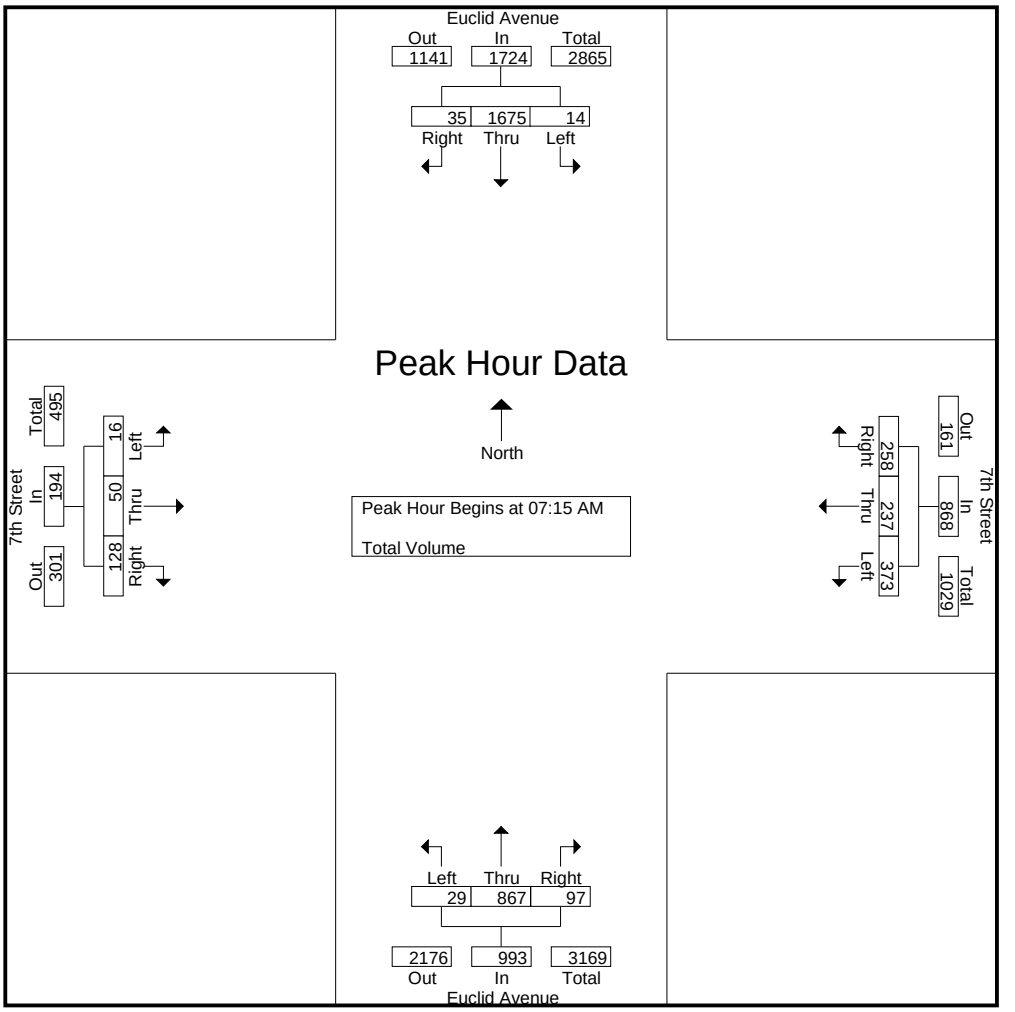
	Euclid Avenue Southbound				7th Street Westbound				Euclid Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	296	3	304	72	23	42	137	2	160	13	175	0	8	17	25	641
07:15 AM	2	405	6	413	103	51	62	216	9	202	23	234	4	7	29	40	903
07:30 AM	7	485	11	503	105	79	76	260	12	210	27	249	6	9	37	52	1064
07:45 AM	5	432	11	448	81	50	62	193	5	230	33	268	3	20	42	65	974
Total	19	1618	31	1668	361	203	242	806	28	802	96	926	13	44	125	182	3582
08:00 AM	0	353	7	360	84	57	58	199	3	225	14	242	3	14	20	37	838
08:15 AM	2	306	9	317	84	47	62	193	6	252	22	280	1	17	20	38	828
08:30 AM	5	316	1	322	62	28	58	148	6	188	20	214	1	15	24	40	724
08:45 AM	9	296	2	307	77	32	44	153	6	192	18	216	2	5	19	26	702
Total	16	1271	19	1306	307	164	222	693	21	857	74	952	7	51	83	141	3092
Grand Total	35	2889	50	2974	668	367	464	1499	49	1659	170	1878	20	95	208	323	6674
Apprch %	1.2	97.1	1.7		44.6	24.5	31		2.6	88.3	9.1		6.2	29.4	64.4		
Total %	0.5	43.3	0.7	44.6	10	5.5	7	22.5	0.7	24.9	2.5	28.1	0.3	1.4	3.1	4.8	

	Euclid Avenue Southbound				7th Street Westbound				Euclid Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	405	6	413	103	51	62	216	9	202	23	234	4	7	29	40	903
07:30 AM	**7**	**485**	**11**	**503**	**105**	**79**	**76**	**260**	**12**	210	27	249	**6**	9	37	52	**1064**
07:45 AM	5	432	11	448	81	50	62	193	5	**230**	**33**	**268**	3	**20**	**42**	**65**	974
08:00 AM	0	353	7	360	84	57	58	199	3	225	14	242	3	14	20	37	838
Total Volume	14	1675	35	1724	373	237	258	868	29	867	97	993	16	50	128	194	3779
% App. Total	0.8	97.2	2		43	27.3	29.7		2.9	87.3	9.8		8.2	25.8	66		
PHF	.500	.863	.795	.857	.888	.750	.849	.835	.604	.942	.735	.926	.667	.625	.762	.746	.888

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 7th Street
Weather: Sunny

File Name : UPEU7AM
Site Code : 03922463
Start Date : 6/4/2008



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	2	405	6	413	103	51	62	216	**12**	210	27	249	4	7	29	40
+15 mins.	**7**	**485**	**11**	**503**	**105**	**79**	**76**	**260**	5	230	**33**	268	**6**	9	37	52
+30 mins.	5	432	11	448	81	50	62	193	3	225	14	242	3	**20**	**42**	**65**
+45 mins.	0	353	7	360	84	57	58	199	6	**252**	22	**280**	3	14	20	37
Total Volume	14	1675	35	1724	373	237	258	868	26	917	96	1039	16	50	128	194
% App. Total	0.8	97.2	2		43	27.3	29.7		2.5	88.3	9.2		8.2	25.8	66	
PHF	.500	.863	.795	.857	.888	.750	.849	.835	.542	.910	.727	.928	.667	.625	.762	.746

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 7th Street
Weather: Sunny

File Name : UPEU7PM
Site Code : 03922463
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

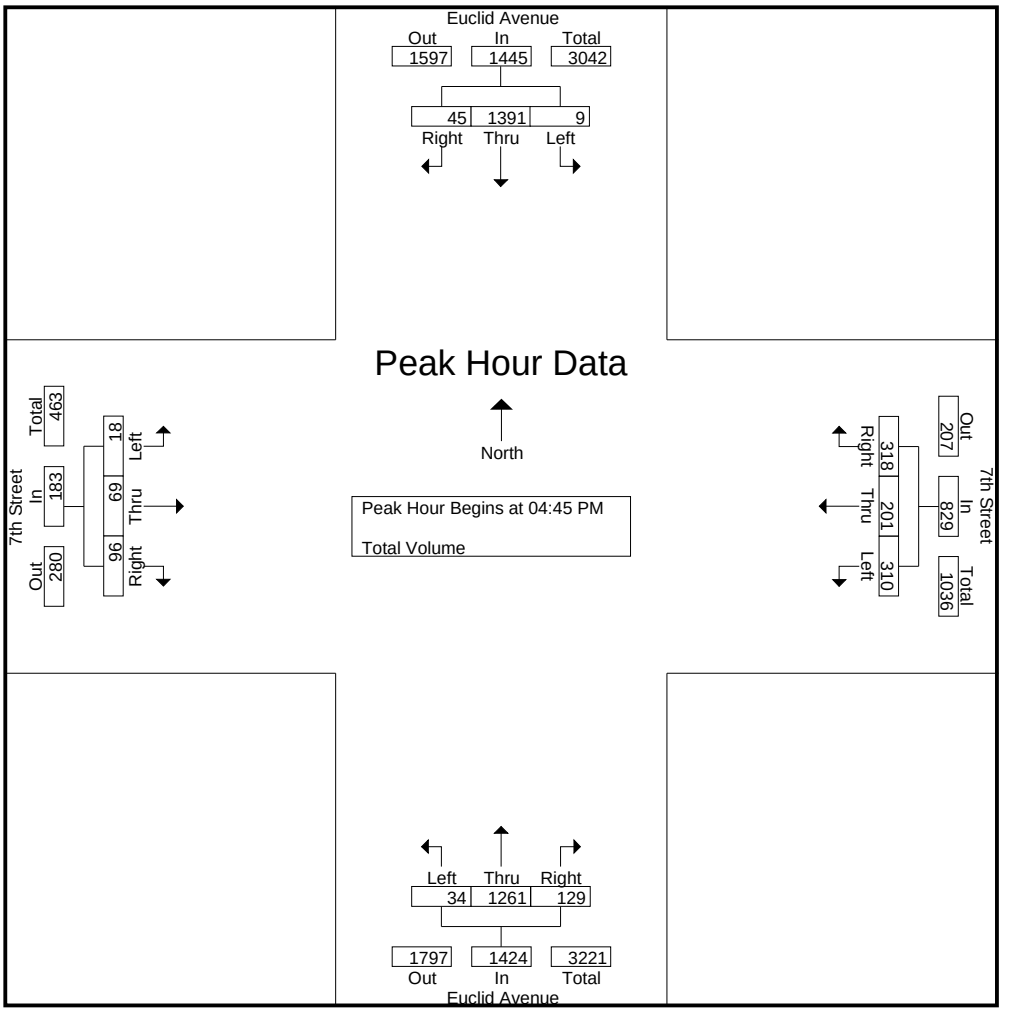
	Euclid Avenue Southbound				7th Street Westbound				Euclid Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	309	9	321	65	41	71	177	13	287	43	343	4	19	28	51	892
04:15 PM	0	312	8	320	59	41	75	175	7	291	32	330	10	17	13	40	865
04:30 PM	1	343	14	358	73	36	81	190	6	289	27	322	6	16	16	38	908
04:45 PM	2	344	12	358	82	51	74	207	12	315	37	364	3	17	19	39	968
Total	6	1308	43	1357	279	169	301	749	38	1182	139	1359	23	69	76	168	3633
05:00 PM	2	366	12	380	76	40	77	193	6	279	32	317	5	14	22	41	931
05:15 PM	3	342	10	355	74	51	78	203	3	360	34	397	6	25	27	58	1013
05:30 PM	2	339	11	352	78	59	89	226	13	307	26	346	4	13	28	45	969
05:45 PM	4	308	10	322	61	36	79	176	10	306	34	350	8	17	15	40	888
Total	11	1355	43	1409	289	186	323	798	32	1252	126	1410	23	69	92	184	3801
Grand Total	17	2663	86	2766	568	355	624	1547	70	2434	265	2769	46	138	168	352	7434
Apprch %	0.6	96.3	3.1		36.7	22.9	40.3		2.5	87.9	9.6		13.1	39.2	47.7		
Total %	0.2	35.8	1.2	37.2	7.6	4.8	8.4	20.8	0.9	32.7	3.6	37.2	0.6	1.9	2.3	4.7	

	Euclid Avenue Southbound				7th Street Westbound				Euclid Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	344	**12**	358	**82**	51	74	207	12	315	**37**	364	3	17	19	39	968
05:00 PM	2	**366**	12	**380**	76	40	77	193	6	279	32	317	5	14	22	41	931
05:15 PM	**3**	342	10	355	74	51	78	203	3	**360**	34	**397**	**6**	**25**	27	**58**	**1013**
05:30 PM	2	339	11	352	78	**59**	**89**	**226**	**13**	307	26	346	4	13	**28**	45	969
Total Volume	9	1391	45	1445	310	201	318	829	34	1261	129	1424	18	69	96	183	3881
% App. Total	0.6	96.3	3.1		37.4	24.2	38.4		2.4	88.6	9.1		9.8	37.7	52.5		
PHF	.750	.950	.938	.951	.945	.852	.893	.917	.654	.876	.872	.897	.750	.690	.857	.789	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: Euclid Avenue
E/W: 7th Street
Weather: Sunny

File Name : UPEU7PM
Site Code : 03922463
Start Date : 6/4/2008



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	1	343	**14**	358	**82**	51	74	207	12	315	**37**	364	5	14	22	41
+15 mins.	2	344	12	358	76	40	77	193	6	279	32	317	6	**25**	27	**58**
+30 mins.	2	**366**	12	**380**	74	51	78	203	3	**360**	34	**397**	4	13	**28**	45
+45 mins.	**3**	342	10	355	78	**59**	**89**	**226**	**13**	307	26	346	**8**	17	15	40
Total Volume	8	1395	48	1451	310	201	318	829	34	1261	129	1424	23	69	92	184
% App. Total	0.6	96.1	3.3		37.4	24.2	38.4		2.4	88.6	9.1		12.5	37.5	50	
PHF	.667	.953	.857	.955	.945	.852	.893	.917	.654	.876	.872	.897	.719	.690	.821	.793

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue/I-10 WB Off Ramp
E/W: 7th Street
Weather: Sunny

File Name : UP10W7AM
Site Code : 03922435
Start Date : 6/4/2008

Groups Printed- Total Volume

	2nd Avenue Southbound				7th Street Westbound				I-10 Westbound Off Ramp Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	43	1	44	93	24	8	125	0	25	0	25	194
07:15 AM	0	0	0	0	0	61	5	66	166	43	24	233	2	27	0	29	328
07:30 AM	0	0	0	0	0	79	2	81	181	50	28	259	5	37	0	42	382
07:45 AM	0	0	0	0	0	60	3	63	137	48	16	201	5	53	0	58	322
Total	0	0	0	0	0	243	11	254	577	165	76	818	12	142	0	154	1226
08:00 AM	0	0	0	0	0	61	7	68	141	28	14	183	0	30	0	30	281
08:15 AM	0	0	0	0	0	53	3	56	145	23	10	178	3	39	0	42	276
08:30 AM	0	0	0	0	0	44	2	46	117	33	9	159	0	37	0	37	242
08:45 AM	0	0	0	0	0	38	3	41	119	27	19	165	0	28	0	28	234
Total	0	0	0	0	0	196	15	211	522	111	52	685	3	134	0	137	1033
Grand Total	0	0	0	0	0	439	26	465	1099	276	128	1503	15	276	0	291	2259
Apprch %	0	0	0		0	94.4	5.6		73.1	18.4	8.5		5.2	94.8	0		
Total %	0	0	0	0	0	19.4	1.2	20.6	48.6	12.2	5.7	66.5	0.7	12.2	0	12.9	

	2nd Avenue Southbound				7th Street Westbound				I-10 Westbound Off Ramp Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	61	5	66	166	43	24	233	2	27	0	29	328
07:30 AM	0	0	0	0	0	**79**	2	**81**	**181**	**50**	**28**	**259**	**5**	37	0	42	**382**
07:45 AM	0	0	0	0	0	60	3	63	137	48	16	201	5	**53**	0	**58**	322
08:00 AM	0	0	0	0	0	61	**7**	68	141	28	14	183	0	30	0	30	281
Total Volume	0	0	0	0	0	261	17	278	625	169	82	876	12	147	0	159	1313
% App. Total	0	0	0		0	93.9	6.1		71.3	19.3	9.4		7.5	92.5	0		
PHF	.000	.000	.000	.000	.000	.826	.607	.858	.863	.845	.732	.846	.600	.693	.000	.685	.859

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue/I-10 WB Off Ramp
E/W: 7th Street
Weather: Sunny

File Name : UP10W7AM
Site Code : 03922435
Start Date : 6/4/2008
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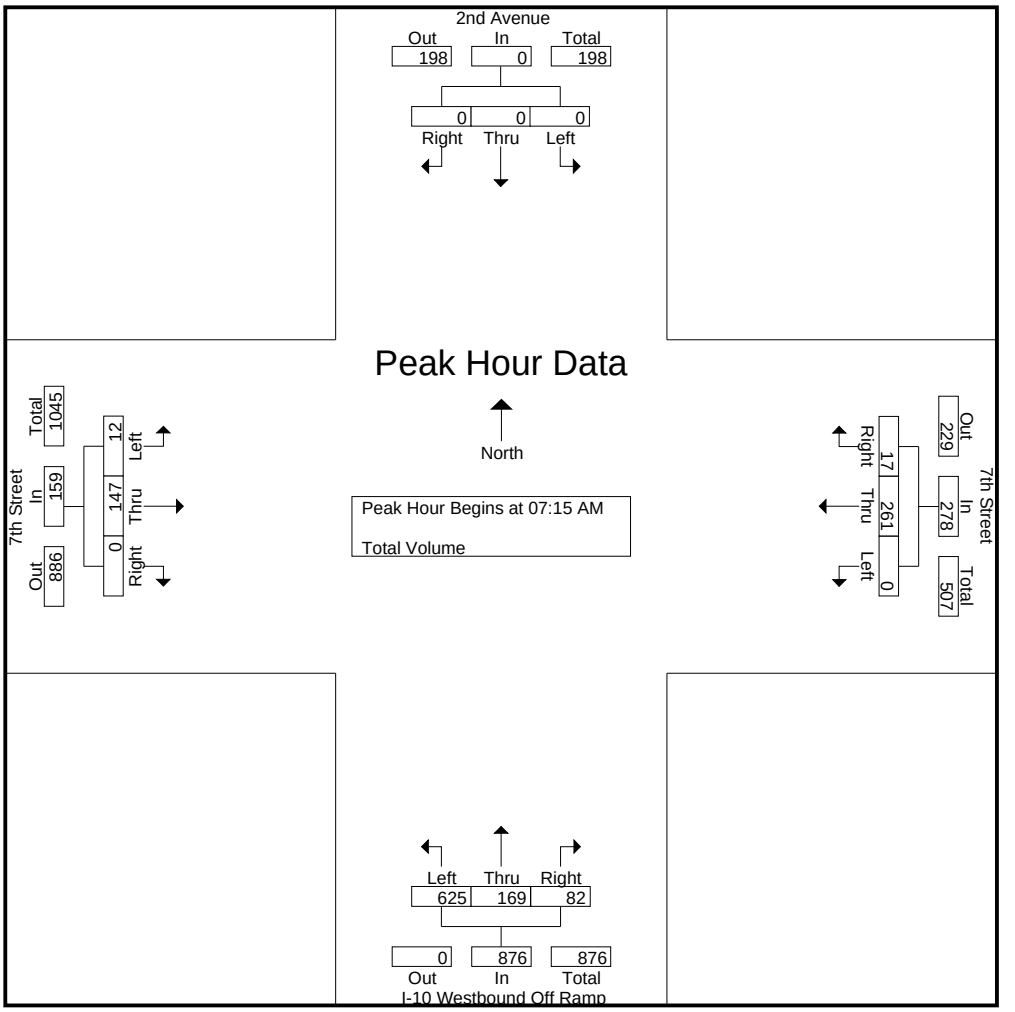


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	0	0	0	0	0	61	5	66	166	43	24	233	**5**	37	0	42
+15 mins.	0	0	0	0	0	**79**	2	**81**	**181**	**50**	**28**	**259**	5	**53**	0	**58**
+30 mins.	0	0	0	0	0	60	3	63	137	48	16	201	0	30	0	30
+45 mins.	0	0	0	0	0	61	**7**	68	141	28	14	183	3	39	0	42
Total Volume	0	0	0	0	0	261	17	278	625	169	82	876	13	159	0	172
% App. Total	0	0	0		0	93.9	6.1		71.3	19.3	9.4		7.6	92.4	0	
PHF	.000	.000	.000	.000	.000	.826	.607	.858	.863	.845	.732	.846	.650	.750	.000	.741

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue/I-10 WB Off Ramp
E/W: 7th Street
Weather: Sunny

File Name : UP10W7PM
Site Code : 03922435
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

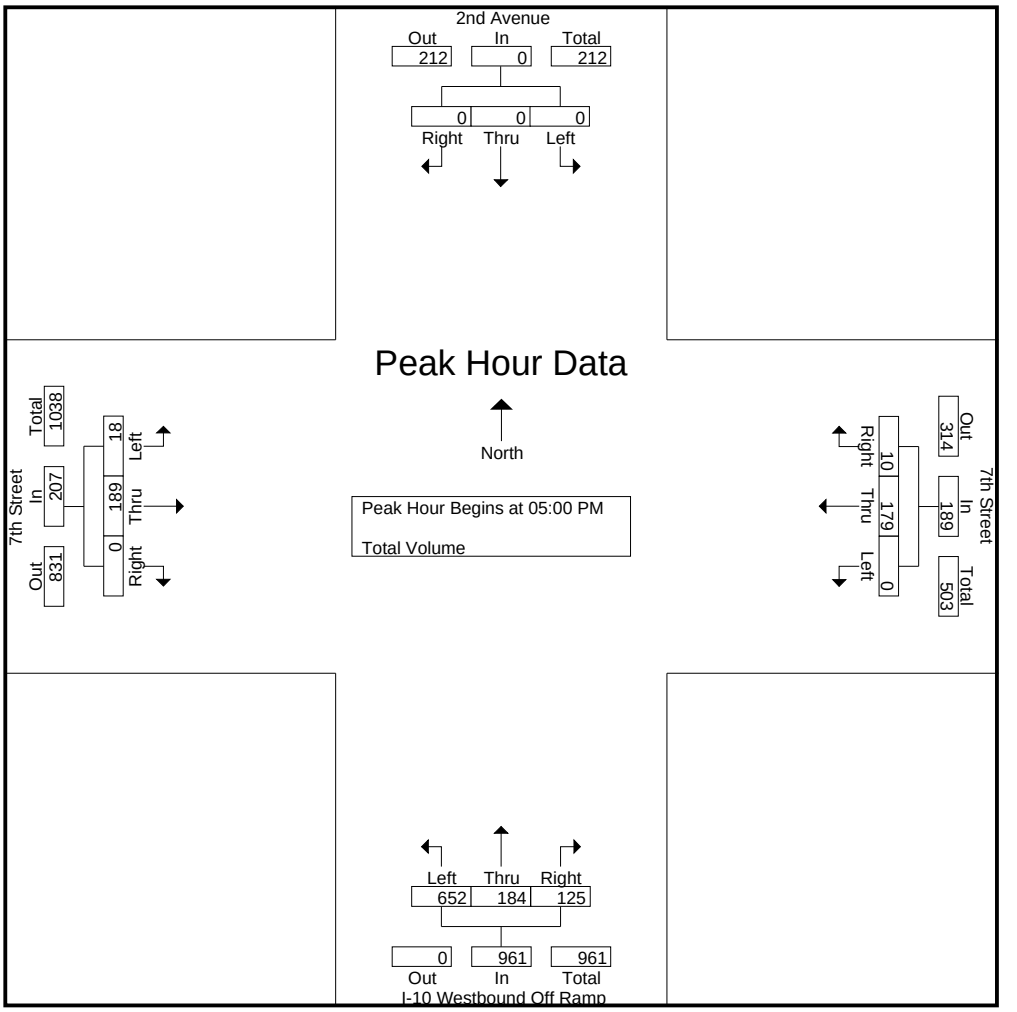
	2nd Avenue Southbound				7th Street Westbound				I-10 Westbound Off Ramp Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	36	1	37	149	30	23	202	5	58	0	63	302
04:15 PM	0	0	0	0	0	38	2	40	147	36	20	203	3	49	0	52	295
04:30 PM	0	0	0	0	0	53	3	56	161	29	20	210	1	44	0	45	311
04:45 PM	0	0	0	0	0	50	5	55	146	44	19	209	4	51	0	55	319
Total	0	0	0	0	0	177	11	188	603	139	82	824	13	202	0	215	1227
05:00 PM	0	0	0	0	0	44	5	49	146	37	31	214	2	42	0	44	307
05:15 PM	0	0	0	0	0	53	2	55	166	48	31	245	6	51	0	57	357
05:30 PM	0	0	0	0	0	41	2	43	183	58	31	272	5	49	0	54	369
05:45 PM	0	0	0	0	0	41	1	42	157	41	32	230	5	47	0	52	324
Total	0	0	0	0	0	179	10	189	652	184	125	961	18	189	0	207	1357
Grand Total	0	0	0	0	0	356	21	377	1255	323	207	1785	31	391	0	422	2584
Apprch %	0	0	0		0	94.4	5.6		70.3	18.1	11.6		7.3	92.7	0		
Total %	0	0	0	0	0	13.8	0.8	14.6	48.6	12.5	8	69.1	1.2	15.1	0	16.3	

	2nd Avenue Southbound				7th Street Westbound				I-10 Westbound Off Ramp Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	44	**5**	49	146	37	31	214	2	42	0	44	307
05:15 PM	0	0	0	0	0	**53**	2	**55**	166	48	31	245	**6**	**51**	0	**57**	357
05:30 PM	0	0	0	0	0	41	2	43	**183**	**58**	31	**272**	5	49	0	54	**369**
05:45 PM	0	0	0	0	0	41	1	42	157	41	**32**	230	5	47	0	52	324
Total Volume	0	0	0	0	0	179	10	189	652	184	125	961	18	189	0	207	1357
% App. Total	0	0	0		0	94.7	5.3		67.8	19.1	13		8.7	91.3	0		
PHF	.000	.000	.000	.000	.000	.844	.500	.859	.891	.793	.977	.883	.750	.926	.000	.908	.919

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue/I-10 WB Off Ramp
E/W: 7th Street
Weather: Sunny

File Name : UP10W7PM
Site Code : 03922435
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	**53**	3	**56**	146	37	31	214	**5**	**58**	0	**63**
+15 mins.	0	0	0	0	0	50	**5**	55	166	48	31	245	3	49	0	52
+30 mins.	0	0	0	0	0	44	5	49	**183**	**58**	31	**272**	1	44	0	45
+45 mins.	0	0	0	0	0	53	2	55	157	41	**32**	230	4	51	0	55
Total Volume	0	0	0	0	0	200	15	215	652	184	125	961	13	202	0	215
% App. Total	0	0	0		0	93	7		67.8	19.1	13		6	94	0	
PHF	.000	.000	.000	.000	.000	.943	.750	.960	.891	.793	.977	.883	.650	.871	.000	.853

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UP2ARAM
Site Code : 03922497
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

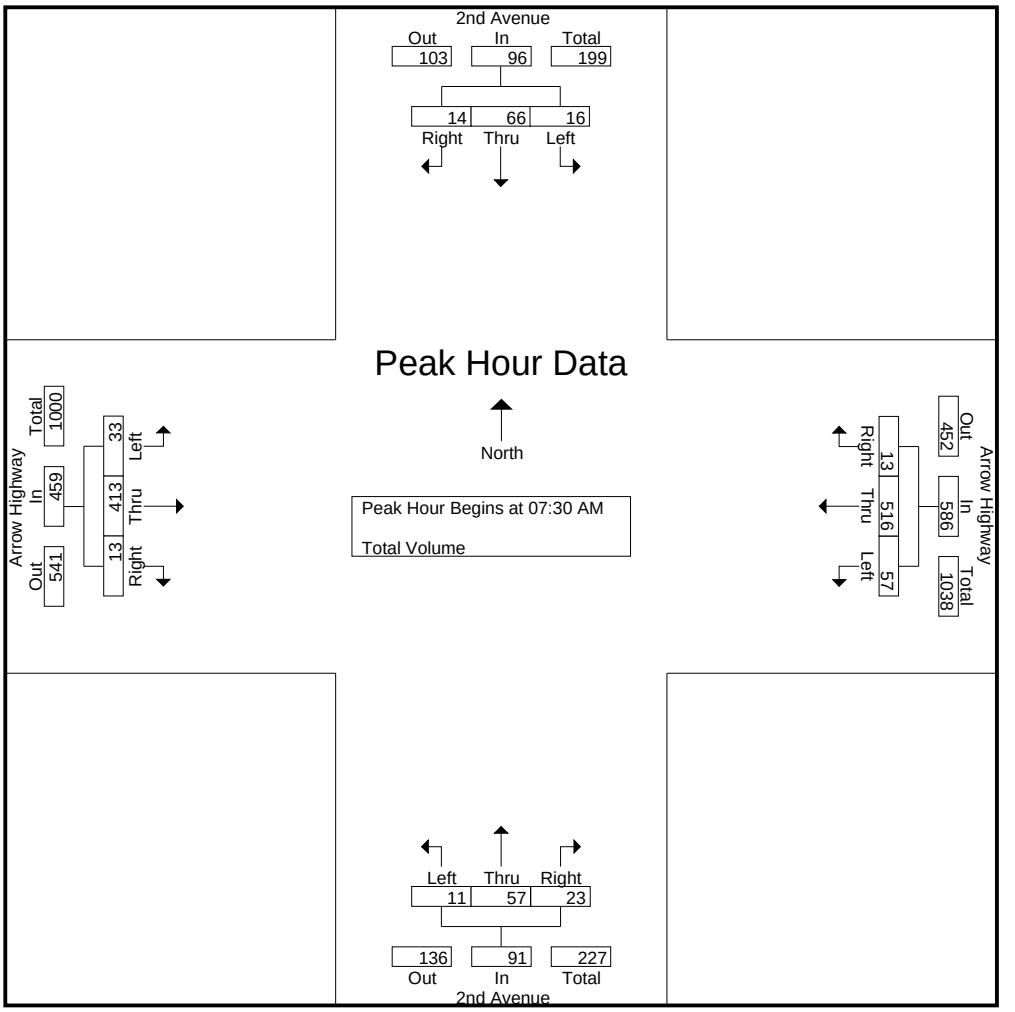
	2nd Avenue Southbound				Arrow Highway Westbound				2nd Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	7	1	9	4	74	0	78	2	5	3	10	4	65	3	72	169
07:15 AM	1	13	2	16	5	112	1	118	3	17	8	28	5	84	4	93	255
07:30 AM	4	19	4	27	11	180	3	194	4	23	3	30	12	106	3	121	372
07:45 AM	6	21	6	33	25	135	6	166	2	12	8	22	15	106	1	122	343
Total	12	60	13	85	45	501	10	556	11	57	22	90	36	361	11	408	1139
08:00 AM	4	17	2	23	13	96	1	110	4	9	8	21	6	87	3	96	250
08:15 AM	2	9	2	13	8	105	3	116	1	13	4	18	0	114	6	120	267
08:30 AM	6	15	2	23	5	98	0	103	5	9	5	19	1	82	5	88	233
08:45 AM	4	11	6	21	14	100	3	117	3	12	7	22	2	93	8	103	263
Total	16	52	12	80	40	399	7	446	13	43	24	80	9	376	22	407	1013
Grand Total	28	112	25	165	85	900	17	1002	24	100	46	170	45	737	33	815	2152
Apprch %	17	67.9	15.2		8.5	89.8	1.7		14.1	58.8	27.1		5.5	90.4	4		
Total %	1.3	5.2	1.2	7.7	3.9	41.8	0.8	46.6	1.1	4.6	2.1	7.9	2.1	34.2	1.5	37.9	

	2nd Avenue Southbound				Arrow Highway Westbound				2nd Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	19	4	27	11	**180**	3	**194**	**4**	**23**	3	**30**	12	106	3	121	**372**
07:45 AM	**6**	**21**	**6**	**33**	**25**	135	**6**	166	2	12	**8**	22	**15**	106	1	**122**	343
08:00 AM	4	17	2	23	13	96	1	110	4	9	8	21	6	87	3	96	250
08:15 AM	2	9	2	13	8	105	3	116	1	13	4	18	0	**114**	**6**	120	267
Total Volume	16	66	14	96	57	516	13	586	11	57	23	91	33	413	13	459	1232
% App. Total	16.7	68.8	14.6		9.7	88.1	2.2		12.1	62.6	25.3		7.2	90	2.8		
PHF	.667	.786	.583	.727	.570	.717	.542	.755	.688	.620	.719	.758	.550	.906	.542	.941	.828

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UP2ARAM
Site Code : 03922497
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	1	13	2	16	5	112	1	118	3	17	**8**	28	12	106	3	121
+15 mins.	4	19	4	27	11	**180**	3	**194**	**4**	**23**	3	**30**	**15**	106	1	**122**
+30 mins.	**6**	**21**	**6**	**33**	**25**	135	**6**	166	2	12	8	22	6	87	3	96
+45 mins.	4	17	2	23	13	96	1	110	4	9	8	21	0	**114**	**6**	120
Total Volume	15	70	14	99	54	523	11	588	13	61	27	101	33	413	13	459
% App. Total	15.2	70.7	14.1		9.2	88.9	1.9		12.9	60.4	26.7		7.2	90	2.8	
PHF	.625	.833	.583	.750	.540	.726	.458	.758	.813	.663	.844	.842	.550	.906	.542	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UP2ARPM
Site Code : 03922497
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

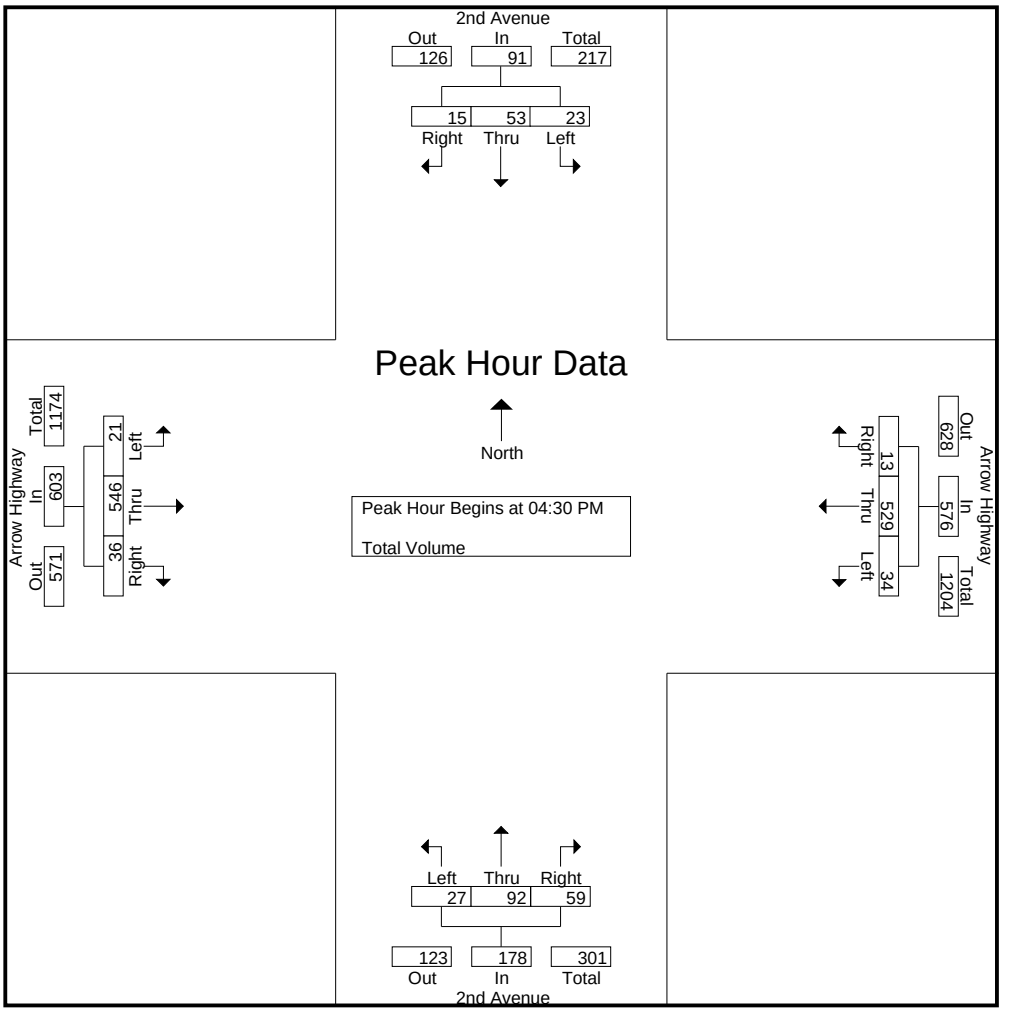
	2nd Avenue Southbound				Arrow Highway Westbound				2nd Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	10	1	15	5	78	2	85	3	12	7	22	2	74	4	80	202
04:15 PM	3	18	2	23	7	134	7	148	4	17	14	35	4	96	4	104	310
04:30 PM	4	11	7	22	7	126	2	135	2	24	17	43	9	132	8	149	349
04:45 PM	6	13	4	23	12	134	3	149	4	13	13	30	5	159	13	177	379
Total	17	52	14	83	31	472	14	517	13	66	51	130	20	461	29	510	1240
05:00 PM	2	12	4	18	9	143	3	155	12	31	17	60	6	129	6	141	374
05:15 PM	11	17	0	28	6	126	5	137	9	24	12	45	1	126	9	136	346
05:30 PM	4	21	3	28	6	95	2	103	4	29	14	47	7	119	9	135	313
05:45 PM	6	18	5	29	6	108	2	116	8	23	14	45	5	120	9	134	324
Total	23	68	12	103	27	472	12	511	33	107	57	197	19	494	33	546	1357
Grand Total	40	120	26	186	58	944	26	1028	46	173	108	327	39	955	62	1056	2597
Apprch %	21.5	64.5	14		5.6	91.8	2.5		14.1	52.9	33		3.7	90.4	5.9		
Total %	1.5	4.6	1	7.2	2.2	36.3	1	39.6	1.8	6.7	4.2	12.6	1.5	36.8	2.4	40.7	

	2nd Avenue Southbound				Arrow Highway Westbound				2nd Avenue Northbound				Arrow Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	4	11	**7**	22	7	126	2	135	2	24	**17**	43	**9**	132	8	149	349
04:45 PM	6	13	4	23	**12**	134	3	149	4	13	13	30	5	**159**	**13**	**177**	**379**
05:00 PM	2	12	4	18	9	**143**	3	**155**	**12**	**31**	17	**60**	6	129	6	141	374
05:15 PM	**11**	**17**	0	**28**	6	126	**5**	137	9	24	12	45	1	126	9	136	346
Total Volume	23	53	15	91	34	529	13	576	27	92	59	178	21	546	36	603	1448
% App. Total	25.3	58.2	16.5		5.9	91.8	2.3		15.2	51.7	33.1		3.5	90.5	6		
PHF	.523	.779	.536	.813	.708	.925	.650	.929	.563	.742	.868	.742	.583	.858	.692	.852	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: Arrow Highway
Weather: Sunny

File Name : UP2ARPM
Site Code : 03922497
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	2	12	4	18	7	134	**7**	148	**12**	**31**	**17**	**60**	**9**	132	8	149
+15 mins.	**11**	17	0	28	7	126	2	135	9	24	12	45	5	**159**	**13**	**177**
+30 mins.	4	**21**	3	28	**12**	134	3	149	4	29	14	47	6	129	6	141
+45 mins.	6	18	**5**	**29**	9	**143**	3	**155**	8	23	14	45	1	126	9	136
Total Volume	23	68	12	103	35	537	15	587	33	107	57	197	21	546	36	603
% App. Total	22.3	66	11.7		6	91.5	2.6		16.8	54.3	28.9		3.5	90.5	6	
PHF	.523	.810	.600	.888	.729	.939	.536	.947	.688	.863	.838	.821	.583	.858	.692	.852

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 9th Street
Weather: Sunny

File Name : UP2ND9AM
Site Code : 03922420
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

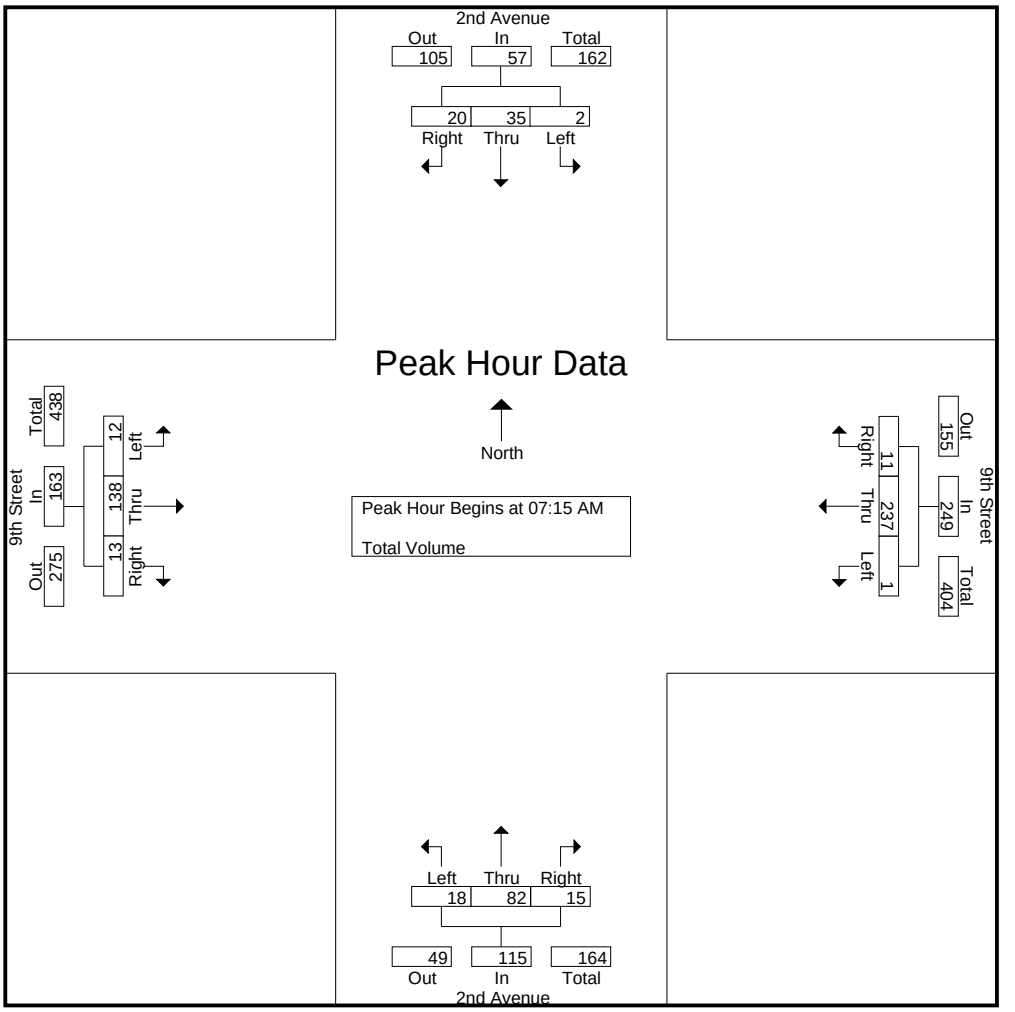
	2nd Avenue Southbound				9th Street Westbound				2nd Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	1	4	0	35	0	35	1	16	3	20	2	19	2	23	82
07:15 AM	1	2	3	6	0	53	5	58	5	17	4	26	3	25	2	30	120
07:30 AM	0	11	6	17	0	77	1	78	5	23	4	32	7	32	3	42	169
07:45 AM	1	15	5	21	0	57	2	59	8	24	4	36	1	50	5	56	172
Total	2	31	15	48	0	222	8	230	19	80	15	114	13	126	12	151	543
08:00 AM	0	7	6	13	1	50	3	54	0	18	3	21	1	31	3	35	123
08:15 AM	3	1	1	5	1	40	1	42	5	16	4	25	2	22	3	27	99
08:30 AM	1	7	5	13	3	44	2	49	1	13	3	17	8	26	0	34	113
08:45 AM	1	6	2	9	1	34	1	36	5	22	1	28	3	27	1	31	104
Total	5	21	14	40	6	168	7	181	11	69	11	91	14	106	7	127	439
Grand Total	7	52	29	88	6	390	15	411	30	149	26	205	27	232	19	278	982
Apprch %	8	59.1	33		1.5	94.9	3.6		14.6	72.7	12.7		9.7	83.5	6.8		
Total %	0.7	5.3	3	9	0.6	39.7	1.5	41.9	3.1	15.2	2.6	20.9	2.7	23.6	1.9	28.3	

	2nd Avenue Southbound				9th Street Westbound				2nd Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	2	3	6	0	53	**5**	58	5	17	**4**	26	3	25	2	30	120
07:30 AM	0	11	**6**	17	0	**77**	1	**78**	5	23	4	32	**7**	32	3	42	169
07:45 AM	1	**15**	5	**21**	0	57	2	59	**8**	**24**	4	**36**	1	**50**	**5**	**56**	**172**
08:00 AM	0	7	6	13	**1**	50	3	54	0	18	3	21	1	31	3	35	123
Total Volume	2	35	20	57	1	237	11	249	18	82	15	115	12	138	13	163	584
% App. Total	3.5	61.4	35.1		0.4	95.2	4.4		15.7	71.3	13		7.4	84.7	8		
PHF	.500	.583	.833	.679	.250	.769	.550	.798	.563	.854	.938	.799	.429	.690	.650	.728	.849

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 9th Street
Weather: Sunny

File Name : UP2ND9AM
Site Code : 03922420
Start Date : 6/4/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	2	3	6	0	53	**5**	58	5	17	**4**	26	3	25	2	30
+15 mins.	0	11	**6**	17	0	**77**	1	**78**	5	23	4	32	**7**	32	3	42
+30 mins.	1	**15**	5	**21**	0	57	2	59	**8**	**24**	4	**36**	1	**50**	**5**	**56**
+45 mins.	0	7	6	13	**1**	50	3	54	0	18	3	21	1	31	3	35
Total Volume	2	35	20	57	1	237	11	249	18	82	15	115	12	138	13	163
% App. Total	3.5	61.4	35.1		0.4	95.2	4.4		15.7	71.3	13		7.4	84.7	8	
PHF	.500	.583	.833	.679	.250	.769	.550	.798	.563	.854	.938	.799	.429	.690	.650	.728

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 9th Street
Weather: Sunny

File Name : UP2ND9PM
Site Code : 03922420
Start Date : 6/4/2008
Page No : 1

Groups Printed- Total Volume

	2nd Avenue Southbound				9th Street Westbound				2nd Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	6	11	5	22	0	45	4	49	3	29	6	38	4	46	12	62	171
04:15 PM	3	11	9	23	3	51	4	58	7	18	5	30	4	48	2	54	165
04:30 PM	2	15	8	25	1	39	7	47	3	30	1	34	2	58	6	66	172
04:45 PM	8	15	2	25	2	39	3	44	3	20	1	24	9	45	5	59	152
Total	19	52	24	95	6	174	18	198	16	97	13	126	19	197	25	241	660
05:00 PM	4	17	2	23	2	42	2	46	6	28	3	37	4	61	7	72	178
05:15 PM	1	9	8	18	5	37	8	50	10	30	7	47	6	43	4	53	168
05:30 PM	1	16	4	21	1	47	3	51	4	30	2	36	5	57	8	70	178
05:45 PM	3	13	6	22	4	29	2	35	3	27	1	31	4	48	9	61	149
Total	9	55	20	84	12	155	15	182	23	115	13	151	19	209	28	256	673
Grand Total	28	107	44	179	18	329	33	380	39	212	26	277	38	406	53	497	1333
Apprch %	15.6	59.8	24.6		4.7	86.6	8.7		14.1	76.5	9.4		7.6	81.7	10.7		
Total %	2.1	8	3.3	13.4	1.4	24.7	2.5	28.5	2.9	15.9	2	20.8	2.9	30.5	4	37.3	

	2nd Avenue Southbound				9th Street Westbound				2nd Avenue Northbound				9th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**8**	15	2	**25**	2	39	3	44	3	20	1	24	**9**	45	5	59	152
05:00 PM	4	**17**	2	23	2	42	2	46	6	28	3	37	4	**61**	7	**72**	**178**
05:15 PM	1	9	**8**	18	**5**	37	**8**	50	**10**	**30**	**7**	**47**	6	43	4	53	168
05:30 PM	1	16	4	21	1	**47**	3	**51**	4	30	2	36	5	57	**8**	70	178
Total Volume	14	57	16	87	10	165	16	191	23	108	13	144	24	206	24	254	676
% App. Total	16.1	65.5	18.4		5.2	86.4	8.4		16	75	9		9.4	81.1	9.4		
PHF	.438	.838	.500	.870	.500	.878	.500	.936	.575	.900	.464	.766	.667	.844	.750	.882	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 9th Street
Weather: Sunny

File Name : UP2ND9PM
Site Code : 03922420
Start Date : 6/4/2008
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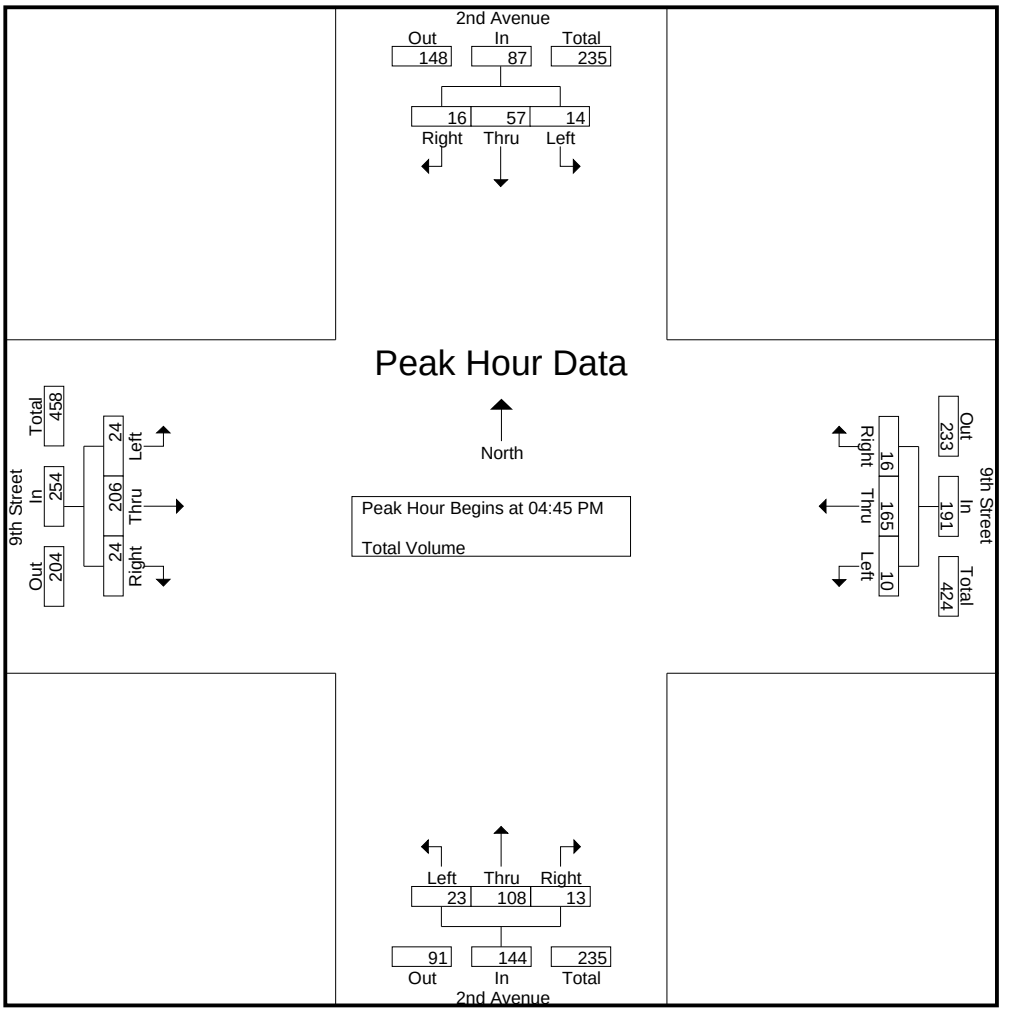


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	3	11	**9**	23	0	45	4	49	6	28	3	37	4	**61**	7	**72**
+15 mins.	2	15	8	**25**	**3**	**51**	4	**58**	**10**	**30**	**7**	**47**	**6**	43	4	53
+30 mins.	**8**	15	2	25	1	39	**7**	47	4	30	2	36	5	57	8	70
+45 mins.	4	**17**	2	23	2	39	3	44	3	27	1	31	4	48	**9**	61
Total Volume	17	58	21	96	6	174	18	198	23	115	13	151	19	209	28	256
% App. Total	17.7	60.4	21.9		3	87.9	9.1		15.2	76.2	8.6		7.4	81.6	10.9	
PHF	.531	.853	.583	.960	.500	.853	.643	.853	.575	.958	.464	.803	.792	.857	.778	.889

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 8th Street
Weather: Sunny

File Name : UP2ND8AM
Site Code : 03922429
Start Date : 6/5/2008
Page No : 1

Groups Printed- Total Volume

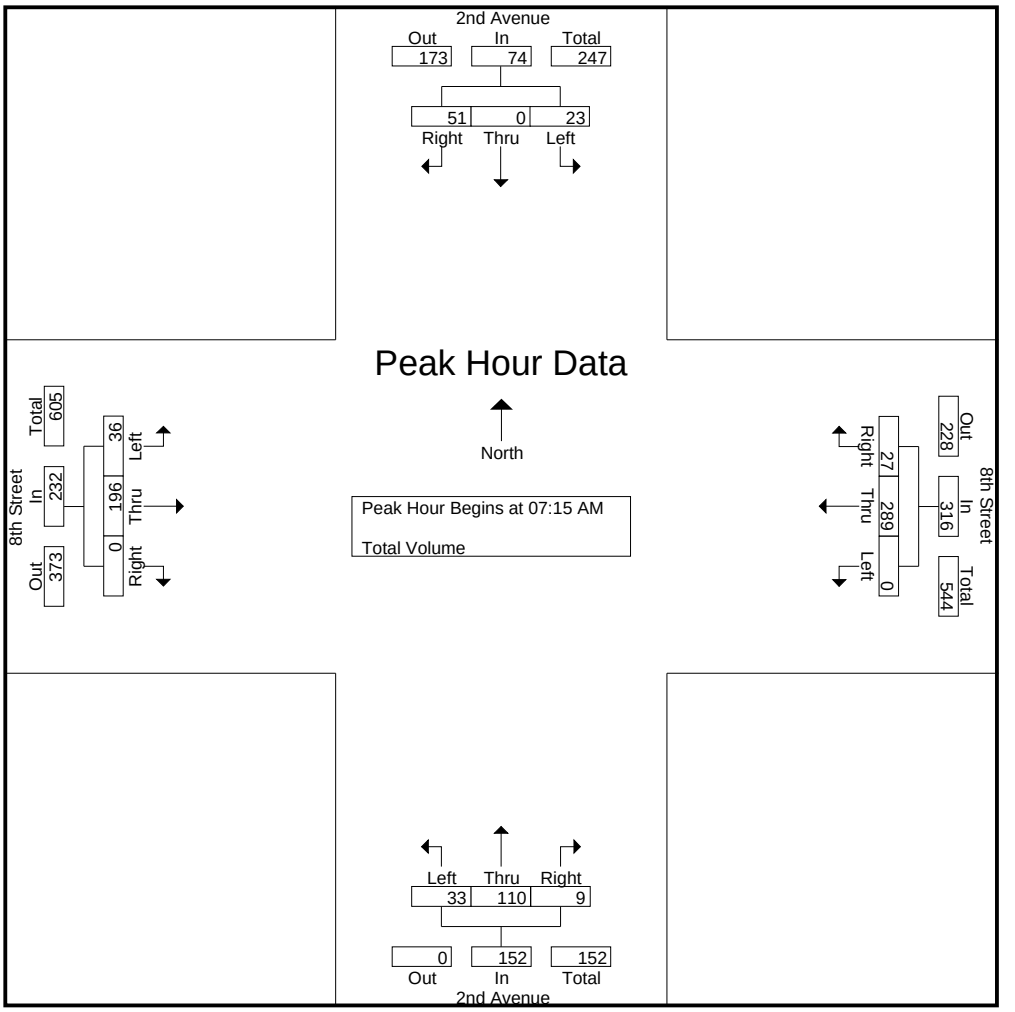
	2nd Avenue Southbound				8th Street Westbound				2nd Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	0	4	6	0	64	1	65	5	27	1	33	2	28	0	30	134
07:15 AM	6	0	8	14	0	79	8	87	9	29	0	38	3	35	0	38	177
07:30 AM	6	0	16	22	0	89	3	92	9	33	4	46	15	68	0	83	243
07:45 AM	6	0	18	24	0	74	7	81	8	27	4	39	9	55	0	64	208
Total	20	0	46	66	0	306	19	325	31	116	9	156	29	186	0	215	762
08:00 AM	5	0	9	14	0	47	9	56	7	21	1	29	9	38	0	47	146
08:15 AM	5	0	3	8	0	53	5	58	7	27	2	36	3	36	0	39	141
08:30 AM	3	0	11	14	0	44	7	51	8	14	2	24	8	33	0	41	130
08:45 AM	4	0	8	12	0	43	5	48	9	18	1	28	2	21	0	23	111
Total	17	0	31	48	0	187	26	213	31	80	6	117	22	128	0	150	528
Grand Total	37	0	77	114	0	493	45	538	62	196	15	273	51	314	0	365	1290
Apprch %	32.5	0	67.5		0	91.6	8.4		22.7	71.8	5.5		14	86	0		
Total %	2.9	0	6	8.8	0	38.2	3.5	41.7	4.8	15.2	1.2	21.2	4	24.3	0	28.3	

	2nd Avenue Southbound				8th Street Westbound				2nd Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**6**	0	8	14	0	79	8	87	**9**	29	0	38	3	35	0	38	177
07:30 AM	6	0	16	22	0	**89**	3	**92**	9	**33**	**4**	**46**	**15**	**68**	0	**83**	**243**
07:45 AM	6	0	**18**	**24**	0	74	7	81	8	27	4	39	9	55	0	64	208
08:00 AM	5	0	9	14	0	47	**9**	56	7	21	1	29	9	38	0	47	146
Total Volume	23	0	51	74	0	289	27	316	33	110	9	152	36	196	0	232	774
% App. Total	31.1	0	68.9		0	91.5	8.5		21.7	72.4	5.9		15.5	84.5	0		
PHF	.958	.000	.708	.771	.000	.812	.750	.859	.917	.833	.563	.826	.600	.721	.000	.699	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 8th Street
Weather: Sunny

File Name : UP2ND8AM
Site Code : 03922429
Start Date : 6/5/2008
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	**6**	0	8	14	0	64	1	65	5	27	1	33	**15**	**68**	0	**83**
+15 mins.	6	0	16	22	0	79	**8**	87	**9**	29	0	38	9	55	0	64
+30 mins.	6	0	**18**	**24**	0	**89**	3	**92**	9	**33**	**4**	**46**	9	38	0	47
+45 mins.	5	0	9	14	0	74	7	81	8	27	4	39	3	36	0	39
Total Volume	23	0	51	74	0	306	19	325	31	116	9	156	36	197	0	233
% App. Total	31.1	0	68.9		0	94.2	5.8		19.9	74.4	5.8		15.5	84.5	0	
PHF	.958	.000	.708	.771	.000	.860	.594	.883	.861	.879	.563	.848	.600	.724	.000	.702

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 8th Street
Weather: Sunny

File Name : UP2ND8PM
Site Code : 03922422
Start Date : 6/5/2008
Page No : 1

Groups Printed- Total Volume

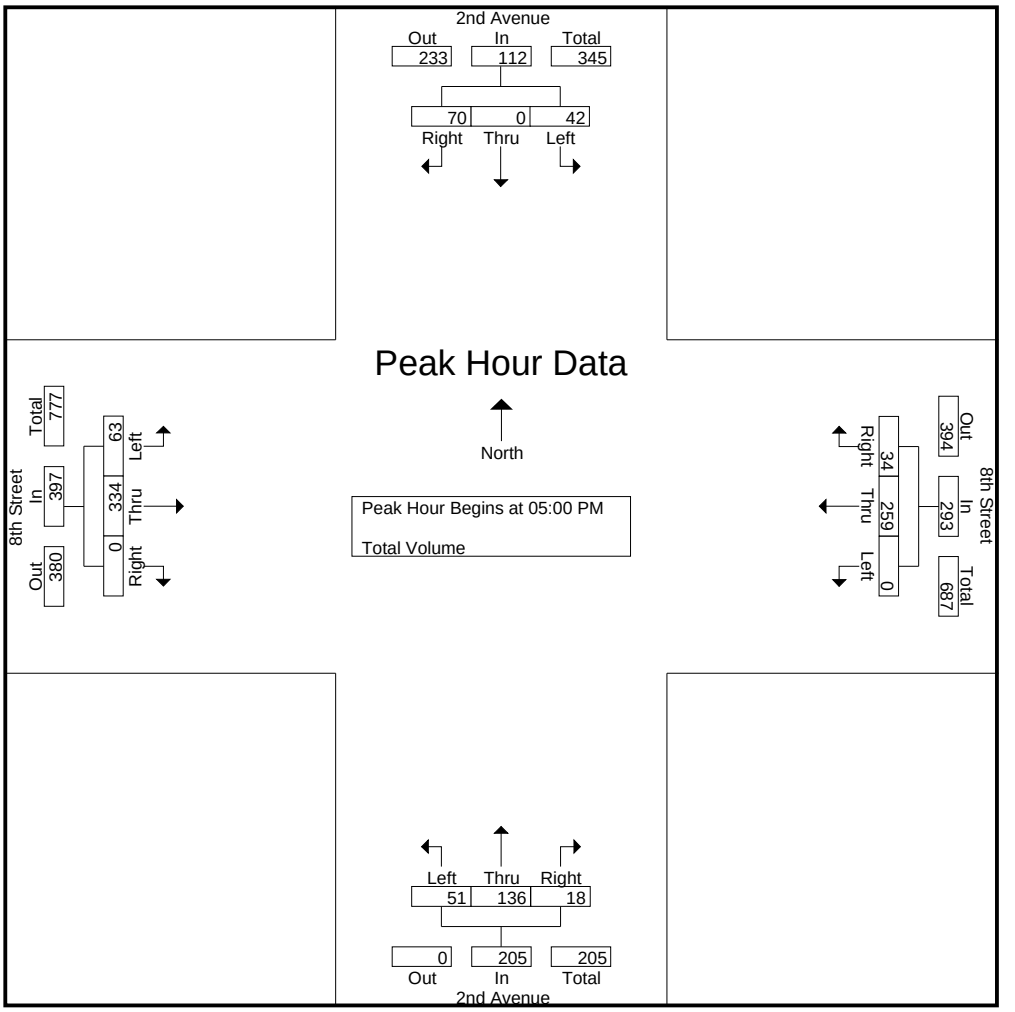
	2nd Avenue Southbound				8th Street Westbound				2nd Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	11	0	13	24	0	56	5	61	10	29	3	42	13	67	0	80	207
04:15 PM	9	0	23	32	0	68	9	77	6	40	0	46	15	73	0	88	243
04:30 PM	14	0	12	26	0	59	5	64	16	36	0	52	9	69	0	78	220
04:45 PM	15	0	13	28	0	61	4	65	11	26	3	40	7	84	0	91	224
Total	49	0	61	110	0	244	23	267	43	131	6	180	44	293	0	337	894
05:00 PM	10	0	18	28	0	50	11	61	16	40	2	58	14	70	0	84	231
05:15 PM	10	0	18	28	0	75	12	87	11	30	3	44	16	93	0	109	268
05:30 PM	13	0	19	32	0	68	7	75	16	28	7	51	15	91	0	106	264
05:45 PM	9	0	15	24	0	66	4	70	8	38	6	52	18	80	0	98	244
Total	42	0	70	112	0	259	34	293	51	136	18	205	63	334	0	397	1007
Grand Total	91	0	131	222	0	503	57	560	94	267	24	385	107	627	0	734	1901
Apprch %	41	0	59		0	89.8	10.2		24.4	69.4	6.2		14.6	85.4	0		
Total %	4.8	0	6.9	11.7	0	26.5	3	29.5	4.9	14	1.3	20.3	5.6	33	0	38.6	

	2nd Avenue Southbound				8th Street Westbound				2nd Avenue Northbound				8th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	10	0	18	28	0	50	11	61	**16**	**40**	2	**58**	14	70	0	84	231
05:15 PM	10	0	18	28	0	**75**	**12**	**87**	11	30	3	44	16	**93**	0	**109**	**268**
05:30 PM	**13**	0	**19**	**32**	0	68	7	75	16	28	**7**	51	15	91	0	106	264
05:45 PM	9	0	15	24	0	66	4	70	8	38	6	52	**18**	80	0	98	244
Total Volume	42	0	70	112	0	259	34	293	51	136	18	205	63	334	0	397	1007
% App. Total	37.5	0	62.5		0	88.4	11.6		24.9	66.3	8.8		15.9	84.1	0		
PHF	.808	.000	.921	.875	.000	.863	.708	.842	.797	.850	.643	.884	.875	.898	.000	.911	.939

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Upland
N/S: 2nd Avenue
E/W: 8th Street
Weather: Sunny

File Name : UP2ND8PM
Site Code : 03922422
Start Date : 6/5/2008
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**15**	0	13	28	0	50	11	61	**16**	**40**	2	**58**	14	70	0	84
+15 mins.	10	0	18	28	0	**75**	**12**	**87**	11	30	3	44	16	**93**	0	**109**
+30 mins.	10	0	18	28	0	68	7	75	16	28	**7**	51	15	91	0	106
+45 mins.	13	0	**19**	**32**	0	66	4	70	8	38	6	52	**18**	80	0	98
Total Volume	48	0	68	116	0	259	34	293	51	136	18	205	63	334	0	397
% App. Total	41.4	0	58.6		0	88.4	11.6		24.9	66.3	8.8		15.9	84.1	0	
PHF	.800	.000	.895	.906	.000	.863	.708	.842	.797	.850	.643	.884	.875	.898	.000	.911

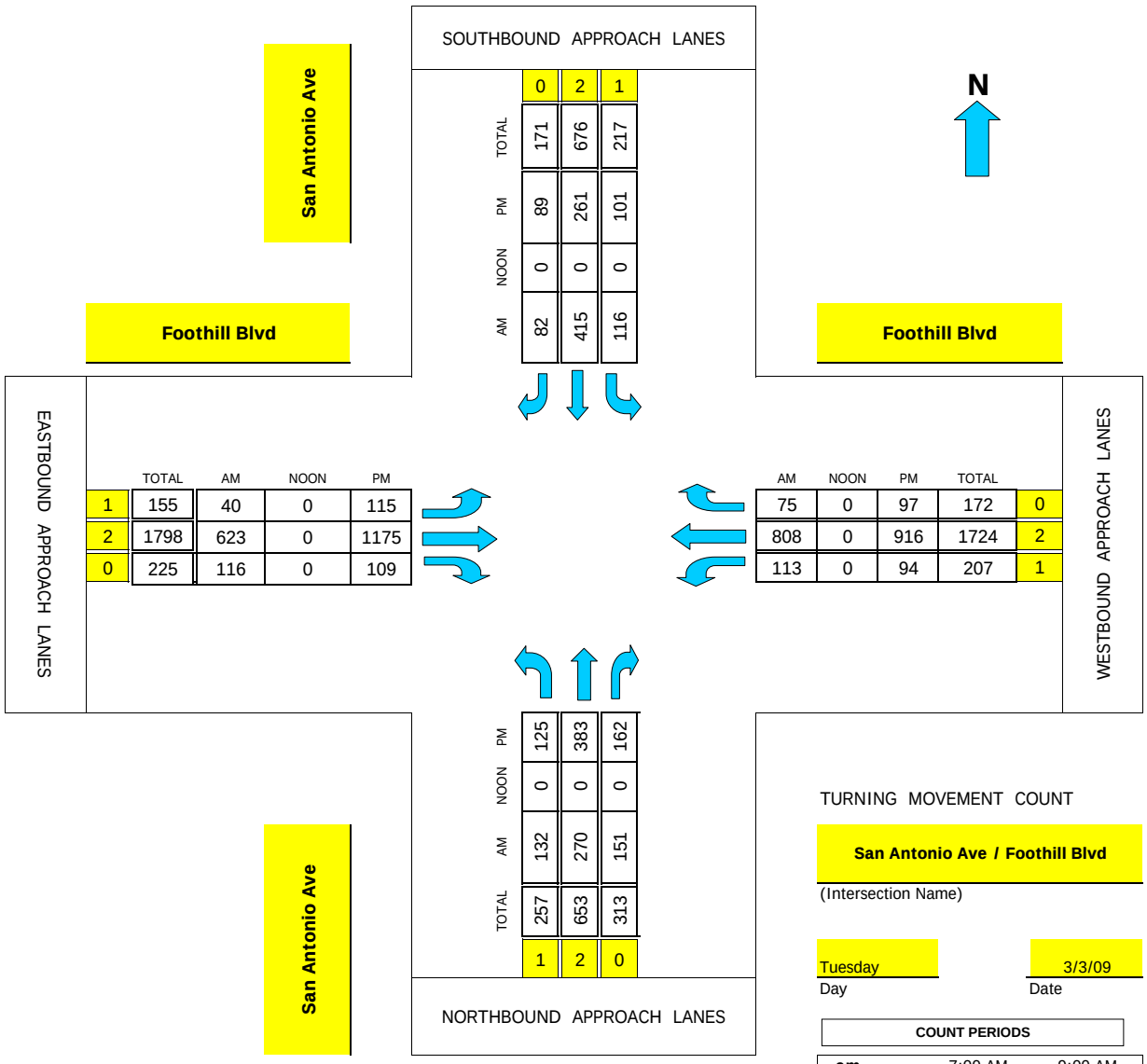
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of San Antonio Ave / Foothill Blvd

Project #: 09-6003-015



	0	2	1
TOTAL	171	676	217
PM	89	261	101
NOON	0	0	0
AM	82	415	116

	TOTAL	AM	NOON	PM
1	155	40	0	115
2	1798	623	0	1175
0	225	116	0	109

AM	NOON	PM	TOTAL	
75	0	97	172	0
808	0	916	1724	2
113	0	94	207	1

	1	2	0
PM	125	383	162
NOON	0	0	0
AM	132	270	151
TOTAL	257	653	313

TURNING MOVEMENT COUNT

San Antonio Ave / Foothill Blvd

(Intersection Name)

Tuesday — Day

3/3/09 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

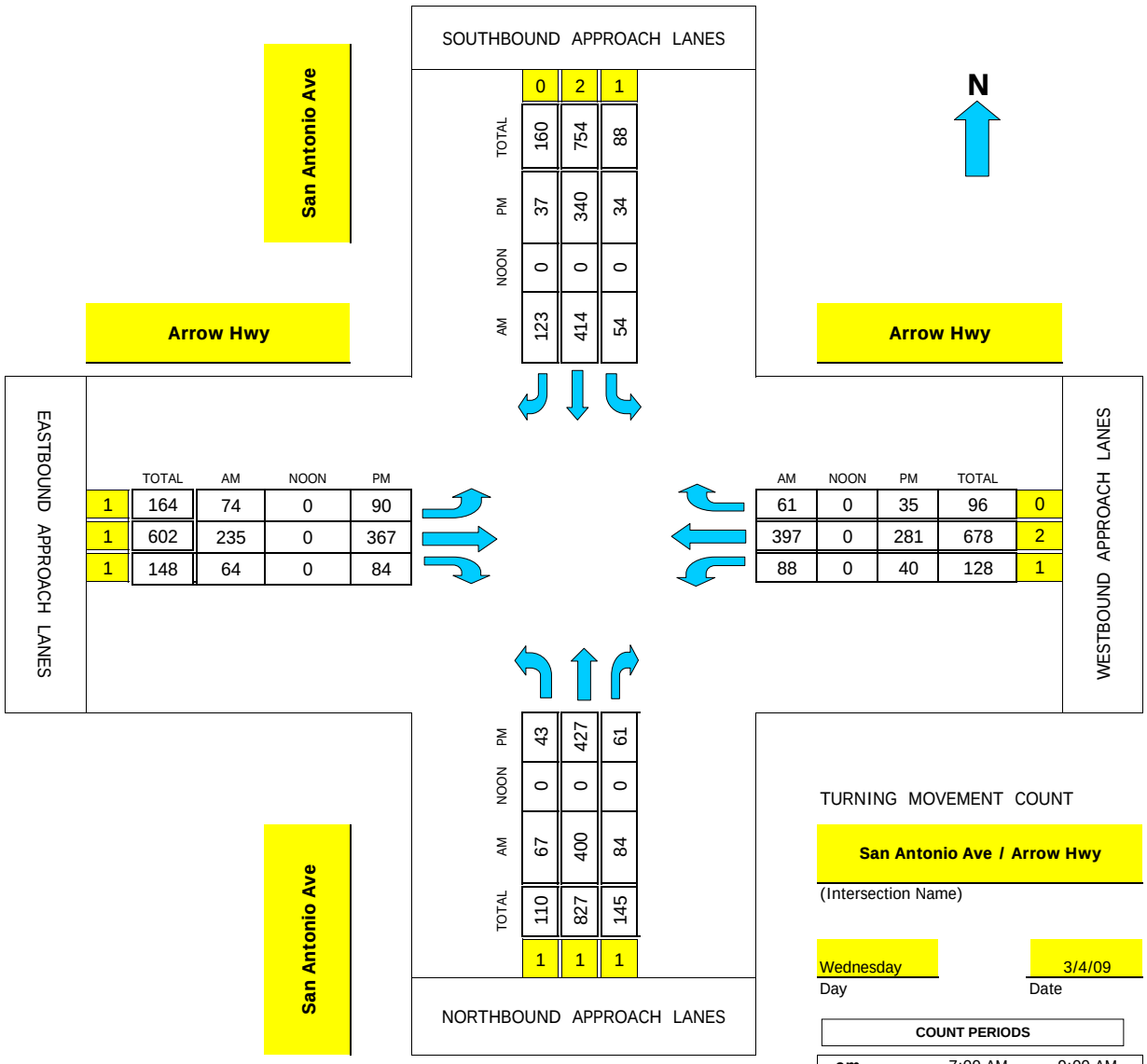
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of San Antonio Ave/Arrow Hwy

Project #: 09-6003-022



	0	2	1
TOTAL	160	754	88
PM	37	340	34
NOON	0	0	0
AM	123	414	54

	TOTAL	AM	NOON	PM
1	164	74	0	90
1	602	235	0	367
1	148	64	0	84

AM	NOON	PM	TOTAL	
61	0	35	96	0
397	0	281	678	2
88	0	40	128	1

	1	1	1
PM	43	427	61
NOON	0	0	0
AM	67	400	84
TOTAL	110	827	145

TURNING MOVEMENT COUNT

San Antonio Ave / Arrow Hwy

(Intersection Name)

Wednesday — Day

3/4/09 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

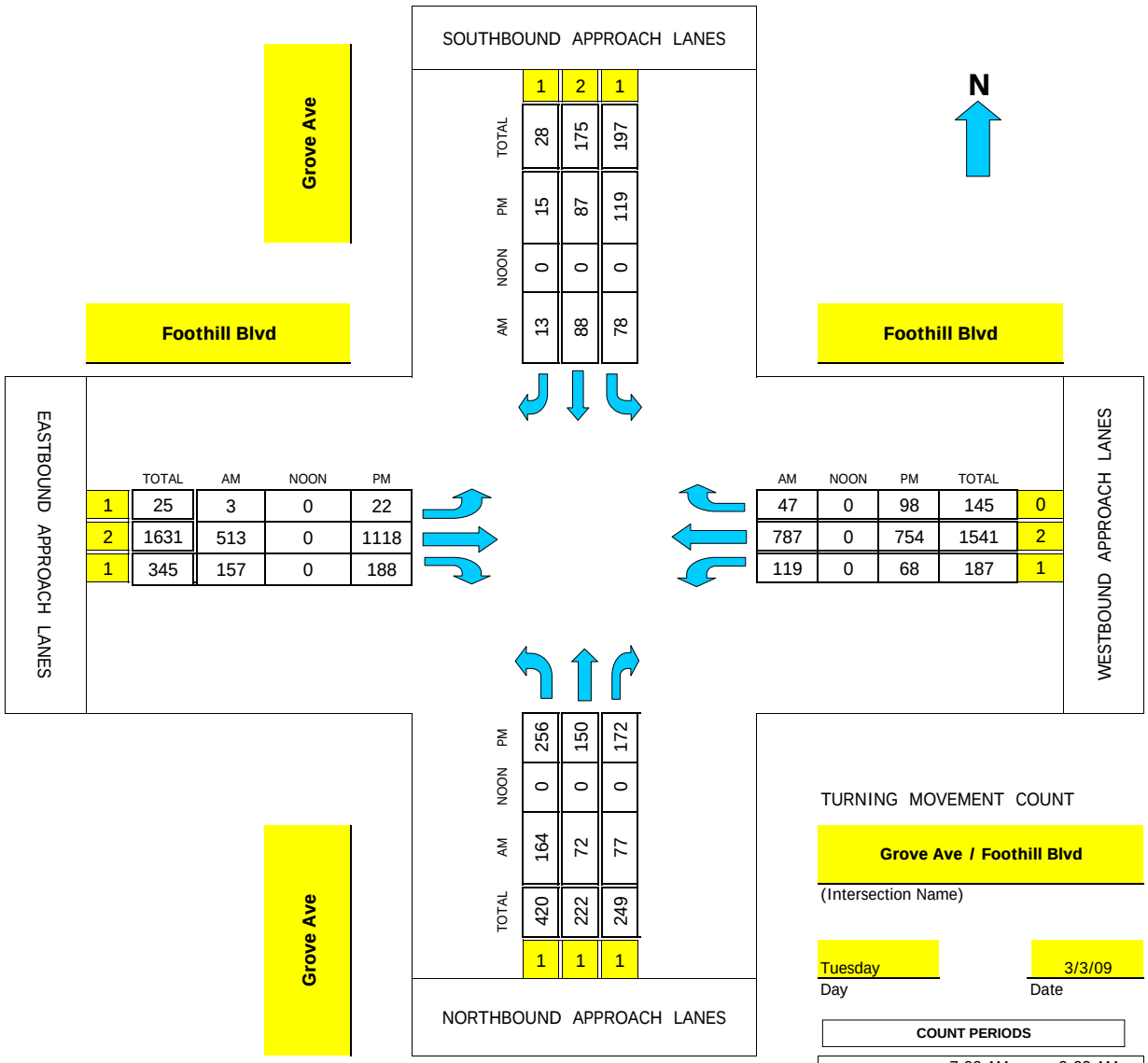
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Grove Ave / Foothill Blvd

Project #: 09-6003-017



TURNING MOVEMENT COUNT

Grove Ave / Foothill Blvd

(Intersection Name)

Tuesday — Day

3/3/09 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

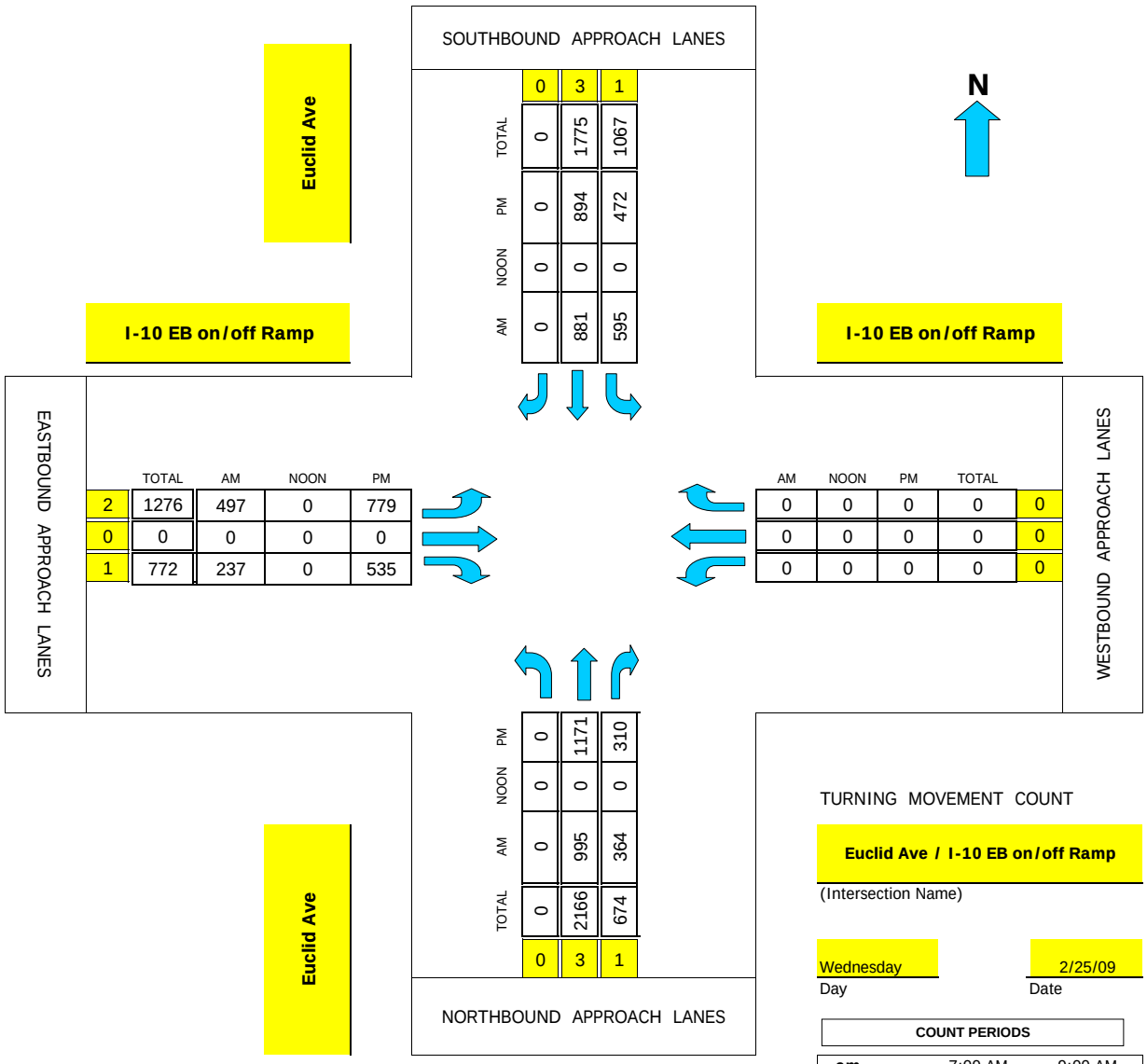
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Euclid Ave / I-10 EB on/off Ramp

Project #: 09-6003-027



TURNING MOVEMENT COUNT

Euclid Ave / I-10 EB on/off Ramp

(Intersection Name)

Wednesday — Day

2/25/09 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

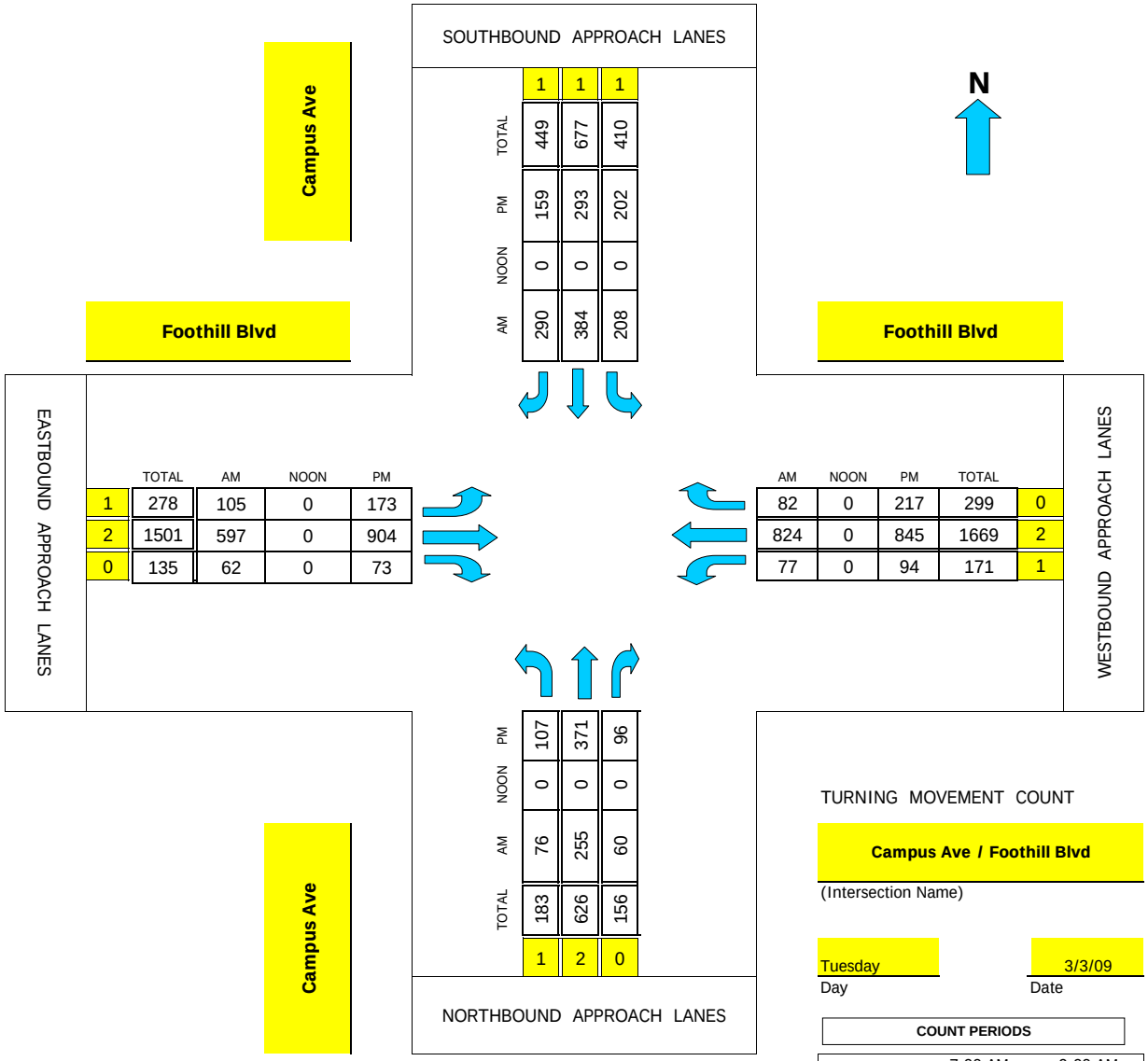
Prepared by:

NDS

National Data & Surveying Services

TMC Summary of Campus Ave / Foothill Blvd

Project #: 09-6003-016



TURNING MOVEMENT COUNT

Campus Ave / Foothill Blvd

(Intersection Name)

Tuesday — Day

3/3/09 — Date

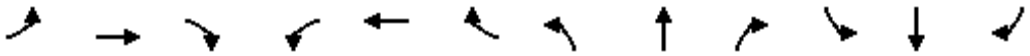
COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon		-	
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

S No.	Location	Direction	ADT	Date
1	8TH ST E/O BENSON AVE.	EB	7,251	03/16/05 - 03/22/05
2	8th ST E/O BENSON AVE.	WB	5,885	03/16/05 - 03/22/05
3	16th STREET W/O CAMPUS AVE	EB	10,203	06/14/05 - 06/21/05
4	16th STREET W/O CAMPUS AVE	WB	8,492	06/14/05 - 06/21/05
5	16th St. W/O Euclid Ave.	EB	7,806	07/07/04 - 07/14/04
6	16th St. W/O Euclid Ave.	WB	5,902	07/07/04 - 07/14/04
7	16th STREET E/O BENSON AVE	WB	9,531	06/21/05 to 06/28/05
8	16th STREET E/O BENSON AVE	EB	7,233	06/21/05 to 06/28/05
9	18th STREET w/o Mountain Ave	WB	1,255	6/28/06 to 7/5/06
10	18th STREET w/o Mountain Ave	EB	1,843	6/28/06 to 7/5/06
11	19TH ST E/O EUCLID AVE	EB	2,942	02/01/05 - 02/08/05
12	19TH ST E/O EUCLID AVE	WB	1,766	02/01/05 - 02/08/05
13	19th St. E/O Mountain Ave.	WB	2,330	06/09/04 - 06/16/04
14	19th St. E/O Mountain Ave.	EB	1,939	06/09/04 - 06/16/04
15	21ST W/O EUCLID AVE	EB	1,624	9/10/07 to 9/16/07
16	21ST W/O EUCLID AVE	WB	1,462	9/10/07 to 9/16/07
17	ARROW HWY E/O BENSON AVE.	EB	3,548	3/30/05 - 4/06/05
18	ARROW HWY E/O BENSON AVE.	WB	3,338	3/30/05 - 4/06/05
19	ARROW HWY W/O EUCLID AVE	EB	4,999	8/26/03 - 9/01/03
20	ARROW HWY W/O EUCLID AVE	WB	5,551	8/26/03 - 9/01/03
21	ARROW HWY W/O GROVE AVE	WB	4,013	8/26/03 - 9/01/03
22	ARROW HWY W/O GROVE AVE	EB	3,467	8/26/03 - 9/01/03
23	ARROW HWY e/o MOUNTAIN AVE	WB	5,565	08/02/06 to 08/08/06
24	ARROW HWY e/o MOUNTAIN AVE	EB	5,363	08/02/06 to 08/08/06
25	ARROW HWY E/O SAN ANTONIO AVE.	EB	5,133	3/30/05 - 4/6/05
26	ARROW HWY E/O SAN ANTONIO AVE.	WB	5,830	3/30/05 - 4/6/05
27	ARROW RTE W/O BENSON AVE	EB	4,214	02/12/08 to 02/12/08
28	ARROW RTE W/O BENSON AVE	WB	4,950	02/12/08 to 02/12/08
29	ARROW RTE W/O CENTRAL AVE	EB	3,174	02/12/08 to 02/12/08
30	ARROW RTE W/O CENTRAL AVE	WB	3,371	02/12/08 to 02/12/08
31	BENSON AVE S/O 16th ST	SB	8,247	08/16/05 to 08/23/05
32	BENSON AVE S/O 16th ST	NB	8,828	08/16/05 to 08/23/05
33	BENSON AVE N/O FOOTHILL BLVD	SB	9,426	05/10/05 to 05/17/05
34	BENSON AVE N/O FOOTHILL BLVD	NB	11,134	05/10/05 to 05/17/05
35	CAMPUS AVE S/O 16TH ST	SB	9,010	09/16/03 - 09/22/03
36	CAMPUS AVE S/O 16TH ST	NB	7,549	09/16/03 - 09/22/03
37	Campus Ave. N/O Foothill Blvd.	NB	6,537	08/04/04 - 08/11/04
38	Campus Ave. N/O Foothill Blvd.	SB	7,444	08/04/04 - 08/11/04
39	EUCLID AVE N/O 15th ST	SB	10,621	06/07/05 to 06/14/05
40	EUCLID AVE N/O 15th ST	NB	10,722	06/07/05 to 06/14/05
41	Grove Ave N/O Foothill Blvd.	SB	1,626	09/22/04 - 09/29/04
42	Grove Ave N/O Foothill Blvd.	NB	1,714	09/22/04 - 09/29/04
43	MOUNTAIN AVE S/O 16th ST	SB	11,437	6/28/05 to 7/5/05
44	MOUNTAIN AVE S/O 16th ST	NB	12,762	6/28/05 to 7/5/05
45	Mountain Ave N/O 21st St.	SB	5,310	06/29/04 - 07/06/04
46	Mountain Ave N/O 21st St.	NB	5,829	06/29/04 - 07/06/04
47	MOUNTAIN AVE S/O ARROW HWY.	NB	18,095	01/18/05 - 01/24/05
48	MOUNTAIN AVE S/O ARROW HWY.	SB	22,318	01/18/05 - 01/24/05
49	MOUNTAIN AVE S/O FOOTHILL BLVD	SB	17,637	8/05/03 - 8/13/03

50	MOUNTAIN AVE S/O FOOTHILL BLVD	NB	16,589	8/05/03 - 8/13/03
51	SAN ANTONIO AVE S/O 16th ST	SB	3,995	7/5/05 to 7/12/05
52	SAN ANTONIO AVE S/O 16th ST	NB	3,513	7/5/05 to 7/12/05
53	SAN ANTONIO AVE S/O FOOTHILL BLVD	SB	9,728	05/24/05 to 05/31/05
54	SAN ANTONIO AVE S/O FOOTHILL BLVD	NB	7,056	05/24/05 to 05/31/05

APPENDIX B- EXISTING LOS RESULTS

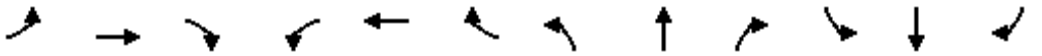


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3494		1770	3488		1770	3381		1770	3404	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3494		1770	3488		1770	3381		1770	3404	
Volume (vph)	115	1175	109	94	916	97	125	383	162	101	261	89
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	120	1224	114	98	954	101	130	399	169	105	272	93
RTOR Reduction (vph)	0	6	0	0	6	0	0	44	0	0	32	0
Lane Group Flow (vph)	120	1332	0	98	1049	0	130	524	0	105	333	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	11.5	53.6		8.8	50.9		9.3	22.2		8.5	21.4	
Effective Green, g (s)	11.5	54.9		8.8	52.2		8.3	22.8		7.5	22.0	
Actuated g/C Ratio	0.10	0.50		0.08	0.47		0.08	0.21		0.07	0.20	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	185	1744		142	1655		134	701		121	681	
v/s Ratio Prot	c0.07	c0.38		0.06	0.30		c0.07	c0.15		0.06	0.10	
v/s Ratio Perm												
v/c Ratio	0.65	0.76		0.69	0.63		0.97	0.75		0.87	0.49	
Uniform Delay, d1	47.3	22.3		49.3	21.7		50.7	40.9		50.8	39.0	
Progression Factor	1.00	1.00		0.95	0.74		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.8	3.2		5.4	0.9		68.1	4.6		42.6	0.2	
Delay (s)	53.1	25.5		52.0	17.0		118.8	45.5		93.3	39.2	
Level of Service	D	C		D	B		F	D		F	D	
Approach Delay (s)		27.8			19.9			59.2			51.3	
Approach LOS		C			B			E			D	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3500		1770	3431		1770	3430		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3500		1770	3431		1770	3430		1770	1863	1583
Volume (vph)	173	904	73	94	845	217	107	371	96	202	293	159
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	180	942	76	98	880	226	111	386	100	210	305	166
RTOR Reduction (vph)	0	5	0	0	22	0	0	24	0	0	0	93
Lane Group Flow (vph)	180	1013	0	98	1084	0	111	462	0	210	305	73
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												6
Actuated Green, G (s)	18.2	48.1		10.9	40.8		10.2	21.3		11.5	22.6	40.8
Effective Green, g (s)	18.2	49.4		10.9	42.1		10.2	22.2		11.5	23.5	42.1
Actuated g/C Ratio	0.17	0.45		0.10	0.38		0.09	0.20		0.10	0.21	0.38
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	5.3
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.5
Lane Grp Cap (vph)	293	1572		175	1313		164	692		185	398	606
v/s Ratio Prot	c0.10	0.29		0.06	c0.32		0.06	0.13		c0.12	c0.16	
v/s Ratio Perm												0.05
v/c Ratio	0.61	0.64		0.56	0.83		0.68	0.67		1.14	0.77	0.12
Uniform Delay, d1	42.6	23.5		47.3	30.6		48.3	40.5		49.2	40.7	22.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.8	2.0		4.1	6.0		10.5	1.9		107.2	7.7	0.4
Delay (s)	46.4	25.5		51.3	36.7		58.8	42.4		156.4	48.4	22.4
Level of Service	D	C		D	D		E	D		F	D	C
Approach Delay (s)		28.7			37.9			45.5			75.4	
Approach LOS		C			D			D			E	

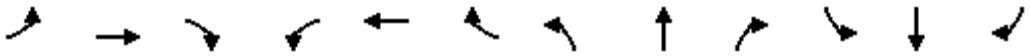
Intersection Summary			
HCM Average Control Delay	43.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3478		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.69	1.00	1.00	0.66	1.00	1.00
Satd. Flow (perm)	466	3539	1583	466	3478		1292	1863	1583	1221	3539	1583
Volume (vph)	22	1118	188	68	754	98	256	150	172	119	87	15
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	23	1189	200	72	802	104	272	160	183	127	93	16
RTOR Reduction (vph)	0	0	120	0	25	0	0	0	11	0	0	10
Lane Group Flow (vph)	23	1189	80	72	881	0	272	160	172	127	93	6
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	186	1391		517	745	633	488	1416	633
v/s Ratio Prot		c0.34			0.25			0.09			0.03	
v/s Ratio Perm	0.05		0.05	0.15			c0.21		0.11	0.10		0.00
v/c Ratio	0.12	0.84	0.13	0.39	0.63		0.53	0.21	0.27	0.26	0.07	0.01
Uniform Delay, d1	7.6	10.8	7.6	8.5	9.6		9.1	7.9	8.1	8.0	7.4	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.38	0.43	0.38	1.00	1.00	1.00
Incremental Delay, d2	1.4	6.1	0.4	6.0	2.2		3.0	0.5	0.8	1.3	0.1	0.0
Delay (s)	8.9	17.0	8.0	14.5	11.8		6.5	3.9	3.9	9.3	7.5	7.3
Level of Service	A	B	A	B	B		A	A	A	A	A	A
Approach Delay (s)		15.6			12.0			5.0			8.5	
Approach LOS		B			B			A			A	

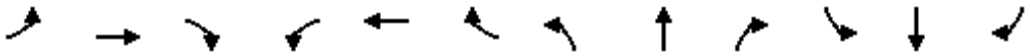
Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3480		1770	1863	1583	1770	3487	
Flt Permitted	0.51	1.00	1.00	0.27	1.00		0.51	1.00	1.00	0.42	1.00	
Satd. Flow (perm)	958	1863	1583	499	3480		944	1863	1583	782	3487	
Volume (vph)	90	367	84	40	281	35	43	427	61	34	340	37
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	408	93	44	312	39	48	474	68	38	378	41
RTOR Reduction (vph)	0	0	48	0	18	0	0	0	29	0	11	0
Lane Group Flow (vph)	100	408	45	44	333	0	48	474	39	38	408	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	17.4	17.4	17.4	17.4	17.4		34.6	34.6	34.6	34.6	34.6	
Effective Green, g (s)	17.4	17.4	17.4	17.4	17.4		34.6	34.6	34.6	34.6	34.6	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.58	0.58	0.58	0.58	0.58	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	278	540	459	145	1009		544	1074	913	451	2011	
v/s Ratio Prot		c0.22			0.10			c0.25			0.12	
v/s Ratio Perm	0.10		0.03	0.09			0.05		0.02	0.05		
v/c Ratio	0.36	0.76	0.10	0.30	0.33		0.09	0.44	0.04	0.08	0.20	
Uniform Delay, d1	16.9	19.4	15.6	16.6	16.7		5.7	7.2	5.5	5.7	6.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	6.0	0.1	1.2	0.2		0.3	1.3	0.1	0.4	0.2	
Delay (s)	17.7	25.3	15.7	17.8	16.9		6.0	8.5	5.6	6.0	6.3	
Level of Service	B	C	B	B	B		A	A	A	A	A	
Approach Delay (s)		22.6			17.0			8.0			6.3	
Approach LOS		C			B			A			A	

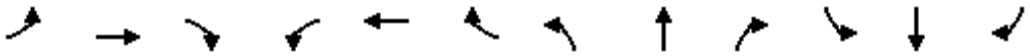
Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		3453			3481						5029	
Flt Permitted		1.00			0.59						1.00	
Satd. Flow (perm)		3453			2089						5029	
Volume (vph)	0	409	79	144	291	0	0	0	0	58	1062	68
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	445	86	157	316	0	0	0	0	63	1154	74
RTOR Reduction (vph)	0	19	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	512	0	0	473	0	0	0	0	0	1284	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		24.7			24.7						55.9	
Effective Green, g (s)		25.2			25.2						56.8	
Actuated g/C Ratio		0.28			0.28						0.63	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		967			585						3174	
v/s Ratio Prot		0.15										
v/s Ratio Perm					c0.23						0.26	
v/c Ratio		0.53			0.89dl						0.40	
Uniform Delay, d1		27.4			30.2						8.2	
Progression Factor		1.00			0.30						1.00	
Incremental Delay, d2		0.2			6.7						0.4	
Delay (s)		27.6			15.8						8.6	
Level of Service		C			B						A	
Approach Delay (s)		27.6			15.8			0.0			8.6	
Approach LOS		C			B			A			A	

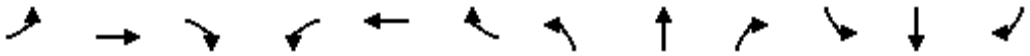
Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



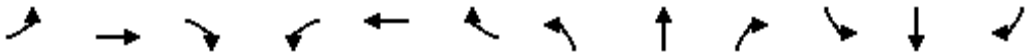
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1856		1770	1754		1770	1800	
Flt Permitted	0.20	1.00	1.00	0.20	1.00		0.71	1.00		0.66	1.00	
Satd. Flow (perm)	373	1863	1583	373	1856		1324	1754		1225	1800	
Volume (vph)	21	546	36	34	529	13	27	92	59	23	53	15
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	22	569	38	35	551	14	28	96	61	24	55	16
RTOR Reduction (vph)	0	0	27	0	1	0	0	24	0	0	6	0
Lane Group Flow (vph)	22	569	11	35	564	0	28	133	0	24	65	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.60	0.60		0.60	0.60	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	107	532	452	107	530		794	1052		735	1080	
v/s Ratio Prot		c0.31			0.30			c0.08			0.04	
v/s Ratio Perm	0.06		0.01	0.09			0.02			0.02		
v/c Ratio	0.21	1.07	0.02	0.33	1.06		0.04	0.13		0.03	0.06	
Uniform Delay, d1	19.0	25.0	18.0	19.7	25.0		5.7	6.1		5.7	5.8	
Progression Factor	1.00	1.00	1.00	0.98	1.10		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	58.9	0.0	1.5	53.7		0.1	0.2		0.1	0.1	
Delay (s)	19.9	83.9	18.0	20.8	81.3		5.8	6.3		5.8	5.9	
Level of Service	B	F	B	C	F		A	A		A	A	
Approach Delay (s)		77.7			77.7			6.2			5.9	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	64.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1844		1770	1822		1770	1820		1770	1833	
Flt Permitted	0.15	1.00		0.16	1.00		0.41	1.00		0.36	1.00	
Satd. Flow (perm)	273	1844		307	1822		766	1820		662	1833	
Volume (vph)	76	484	35	54	456	79	43	339	61	44	312	37
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	90	576	42	64	543	94	51	404	73	52	371	44
RTOR Reduction (vph)	0	5	0	0	12	0	0	7	0	0	5	0
Lane Group Flow (vph)	90	613	0	64	625	0	51	470	0	52	410	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.6	28.6		27.6	27.6		33.4	33.4		32.9	32.9	
Effective Green, g (s)	28.6	28.6		28.6	28.6		33.4	33.4		33.4	33.4	
Actuated g/C Ratio	0.41	0.41		0.41	0.41		0.48	0.48		0.48	0.48	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	112	753		125	744		365	868		316	875	
v/s Ratio Prot		0.33			c0.34			c0.26			0.22	
v/s Ratio Perm	0.33			0.21			0.07			0.08		
v/c Ratio	0.80	0.81		0.51	0.84		0.14	0.54		0.16	0.47	
Uniform Delay, d1	18.2	18.3		15.5	18.6		10.3	12.9		10.4	12.3	
Progression Factor	2.04	1.77		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.2	3.2		3.5	8.3		0.8	2.4		1.1	1.8	
Delay (s)	54.3	35.7		19.0	26.9		11.1	15.3		11.5	14.1	
Level of Service	D	D		B	C		B	B		B	B	
Approach Delay (s)		38.1			26.2			14.9			13.8	
Approach LOS		D			C			B			B	

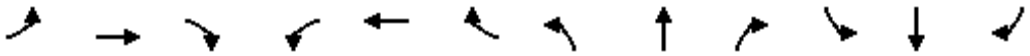
Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1798		1770	1779		1770	1863	1583	1770	1853	
Flt Permitted	0.47	1.00		0.47	1.00		0.37	1.00	1.00	0.31	1.00	
Satd. Flow (perm)	869	1798		873	1779		684	1863	1583	586	1853	
Volume (vph)	20	260	78	78	238	102	31	467	135	93	408	15
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	283	85	85	259	111	34	508	147	101	443	16
RTOR Reduction (vph)	0	27	0	0	38	0	0	0	88	0	3	0
Lane Group Flow (vph)	22	341	0	85	332	0	34	508	59	101	456	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	348	719		349	712		274	745	633	234	741	
v/s Ratio Prot		c0.19			0.19			c0.27			0.25	
v/s Ratio Perm	0.03			0.10			0.05		0.04	0.17		
v/c Ratio	0.06	0.47		0.24	0.47		0.12	0.68	0.09	0.43	0.62	
Uniform Delay, d1	7.4	8.9		8.0	8.8		7.6	9.9	7.5	8.7	9.6	
Progression Factor	1.00	1.00		1.00	1.00		1.17	1.28	2.88	1.07	1.05	
Incremental Delay, d2	0.3	2.2		1.7	2.2		0.8	4.6	0.3	5.7	3.8	
Delay (s)	7.7	11.1		9.6	11.0		9.7	17.2	21.8	15.0	13.9	
Level of Service	A	B		A	B		A	B	C	B	B	
Approach Delay (s)		10.9			10.8			17.8			14.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

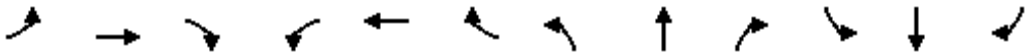
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.96		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1791		1770	3455		1770	3497	
Flt Permitted	0.61	1.00		0.48	1.00		0.44	1.00		0.42	1.00	
Satd. Flow (perm)	1145	1795		888	1791		828	3455		790	3497	
Volume (vph)	73	252	80	65	158	54	31	432	81	56	448	39
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	274	87	71	172	59	34	470	88	61	487	42
RTOR Reduction (vph)	0	29	0	0	31	0	0	38	0	0	16	0
Lane Group Flow (vph)	79	332	0	71	200	0	34	520	0	61	513	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	458	718		355	716		331	1382		316	1399	
v/s Ratio Prot		c0.19			0.11			c0.15			0.15	
v/s Ratio Perm	0.07			0.08			0.04			0.08		
v/c Ratio	0.17	0.46		0.20	0.28		0.10	0.38		0.19	0.37	
Uniform Delay, d1	7.7	8.8		7.8	8.1		7.5	8.5		7.8	8.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	2.1		1.3	1.0		0.6	0.8		1.4	0.7	
Delay (s)	8.6	11.0		9.1	9.1		8.1	9.3		9.2	9.2	
Level of Service	A	B		A	A		A	A		A	A	
Approach Delay (s)		10.5			9.1			9.2			9.2	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

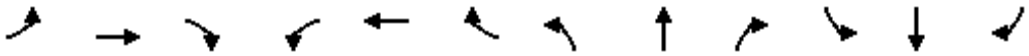


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3446			3419						5042	
Flt Permitted		1.00			0.63						1.00	
Satd. Flow (perm)		3446			2221						5042	
Volume (vph)	0	314	67	176	75	0	0	0	0	19	1095	60
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	324	69	181	77	0	0	0	0	20	1129	62
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	371	0	0	258	0	0	0	0	0	1206	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		16.0			16.0						64.1	
Effective Green, g (s)		17.0			17.0						65.0	
Actuated g/C Ratio		0.19			0.19						0.72	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		651			420						3641	
v/s Ratio Prot		0.11										
v/s Ratio Perm					c0.12						0.24	
v/c Ratio		0.57			1.27dl						0.33	
Uniform Delay, d1		33.2			33.5						4.6	
Progression Factor		1.00			0.38						1.33	
Incremental Delay, d2		0.8			1.8						0.2	
Delay (s)		33.9			14.3						6.3	
Level of Service		C			B						A	
Approach Delay (s)		33.9			14.3			0.0			6.3	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

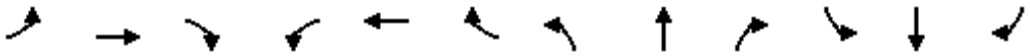
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

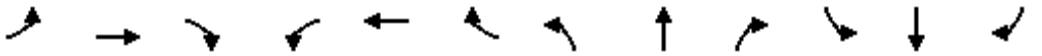
Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1771		1770	1809		1770	3459		1770	3487	
Flt Permitted	0.65	1.00		0.62	1.00		0.45	1.00		0.33	1.00	
Satd. Flow (perm)	1219	1771		1148	1809		845	3459		616	3487	
Volume (vph)	47	147	72	96	126	30	71	574	102	23	446	49
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	49	153	75	100	131	31	74	598	106	24	465	51
RTOR Reduction (vph)	0	44	0	0	19	0	0	36	0	0	21	0
Lane Group Flow (vph)	49	184	0	100	143	0	74	668	0	24	495	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	488	708		459	724		338	1384		246	1395	
v/s Ratio Prot		c0.10			0.08			c0.19			0.14	
v/s Ratio Perm	0.04			0.09			0.09			0.04		
v/c Ratio	0.10	0.26		0.22	0.20		0.22	0.48		0.10	0.35	
Uniform Delay, d1	7.5	8.0		7.9	7.8		7.9	8.9		7.5	8.4	
Progression Factor	1.00	1.00		1.00	1.00		0.85	0.93		0.89	0.98	
Incremental Delay, d2	0.4	0.9		1.1	0.6		1.3	1.1		0.7	0.6	
Delay (s)	7.9	8.9		9.0	8.4		8.0	9.4		7.4	8.8	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		8.7			8.6			9.2			8.8	
Approach LOS		A			A			A			A	

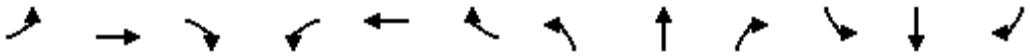
Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



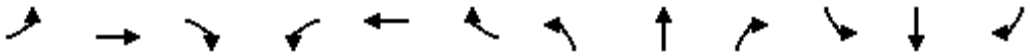
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	3412		1770	1837		1770	1863	1583
Flt Permitted	0.53	1.00	1.00	0.29	1.00		0.43	1.00		0.48	1.00	1.00
Satd. Flow (perm)	994	1863	1583	548	3412		802	1837		901	1863	1583
Volume (vph)	166	351	110	38	230	73	68	330	33	68	427	127
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	180	382	120	41	250	79	74	359	36	74	464	138
RTOR Reduction (vph)	0	0	86	0	57	0	0	5	0	0	0	57
Lane Group Flow (vph)	180	382	34	41	272	0	74	390	0	74	464	81
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	16.9	16.9	16.9	16.9	16.9		35.1	35.1		35.1	35.1	35.1
Effective Green, g (s)	16.9	16.9	16.9	16.9	16.9		35.1	35.1		35.1	35.1	35.1
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28		0.59	0.59		0.59	0.59	0.59
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	280	525	446	154	961		469	1075		527	1090	926
v/s Ratio Prot		c0.21			0.08			0.21			c0.25	
v/s Ratio Perm	0.18		0.02	0.07			0.09			0.08		0.05
v/c Ratio	0.64	0.73	0.08	0.27	0.28		0.16	0.36		0.14	0.43	0.09
Uniform Delay, d1	18.9	19.5	15.8	16.7	16.8		5.7	6.6		5.6	6.9	5.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.0	5.0	0.1	0.9	0.2		0.7	1.0		0.6	1.2	0.2
Delay (s)	23.9	24.5	15.9	17.7	17.0		6.4	7.5		6.2	8.1	5.6
Level of Service	C	C	B	B	B		A	A		A	A	A
Approach Delay (s)		22.8			17.1			7.3			7.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3426			3495						5030	
Flt Permitted		1.00			0.66						1.00	
Satd. Flow (perm)		3426			2329						5030	
Volume (vph)	0	363	98	87	259	0	0	0	0	78	1448	91
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	395	107	95	282	0	0	0	0	85	1574	99
RTOR Reduction (vph)	0	25	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	477	0	0	377	0	0	0	0	0	1751	0
Turn Type	Perm			Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases	4			8						6		
Actuated Green, G (s)		25.4			25.4						53.7	
Effective Green, g (s)		27.4			27.4						54.6	
Actuated g/C Ratio		0.30			0.30						0.61	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1043			709						3052	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.16						0.35	
v/c Ratio		0.46			0.53						0.57	
Uniform Delay, d1		25.3			26.0						10.7	
Progression Factor		1.00			0.33						0.58	
Incremental Delay, d2		0.1			0.3						0.8	
Delay (s)		25.4			8.9						6.9	
Level of Service		C			A						A	
Approach Delay (s)		25.4			8.9			0.0			6.9	
Approach LOS		C			A			A			A	

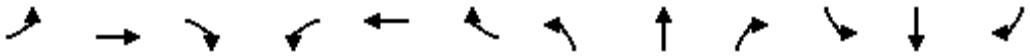
Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	63	334	0	0	259	34	51	136	18	42	0	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	363	0	0	282	37	55	148	20	46	0	76

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	432	318	55	167	122
Volume Left (vph)	68	0	55	0	46
Volume Right (vph)	0	37	0	20	76
Hadj (s)	0.07	-0.04	0.53	-0.05	-0.27
Departure Headway (s)	5.7	5.8	7.5	6.9	6.5
Degree Utilization, x	0.68	0.51	0.11	0.32	0.22
Capacity (veh/h)	610	578	430	466	466
Control Delay (s)	19.9	14.7	10.2	11.8	11.3
Approach Delay (s)	19.9	14.7	11.4		11.3
Approach LOS	C	B	B		B

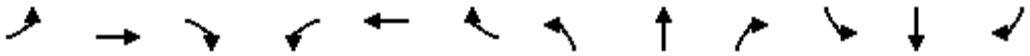
Intersection Summary				
Delay	15.7			
HCM Level of Service	C			
Intersection Capacity Utilization	65.0%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	117	278	38	18	234	56	26	283	24	72	297	69
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	127	302	41	20	254	61	28	308	26	78	323	75

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	471	335	362	476
Volume Left (vph)	127	20	28	78
Volume Right (vph)	41	61	26	75
Hadj (s)	0.04	-0.06	0.01	-0.03
Departure Headway (s)	9.1	9.3	9.2	9.0
Degree Utilization, x	1.19	0.87	0.93	1.19
Capacity (veh/h)	400	374	383	402
Control Delay (s)	135.8	49.5	60.0	137.5
Approach Delay (s)	135.8	49.5	60.0	137.5
Approach LOS	F	E	F	F

Intersection Summary			
Delay	102.0		
HCM Level of Service	F		
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		



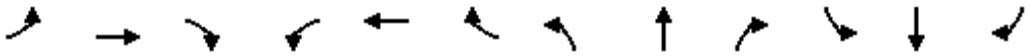
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1818		1770	1863	1583	1770	3497		1770	3497	
Flt Permitted	0.66	1.00		0.62	1.00	1.00	0.38	1.00		0.29	1.00	
Satd. Flow (perm)	1232	1818		1151	1863	1583	709	3497		542	3497	
Volume (vph)	65	174	33	38	138	58	34	655	57	33	528	45
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	189	36	41	150	63	37	712	62	36	574	49
RTOR Reduction (vph)	0	17	0	0	0	38	0	16	0	0	16	0
Lane Group Flow (vph)	71	208	0	41	150	25	37	758	0	36	607	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	493	727		460	745	633	284	1399		217	1399	
v/s Ratio Prot		c0.11			0.08			c0.22			0.17	
v/s Ratio Perm	0.06			0.04		0.02	0.05			0.07		
v/c Ratio	0.14	0.29		0.09	0.20	0.04	0.13	0.54		0.17	0.43	
Uniform Delay, d1	7.6	8.1		7.5	7.8	7.3	7.6	9.2		7.7	8.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.90	0.96	
Incremental Delay, d2	0.6	1.0		0.4	0.6	0.1	0.9	1.5		1.6	0.9	
Delay (s)	8.3	9.1		7.8	8.4	7.4	8.5	10.7		8.5	9.3	
Level of Service	A	A		A	A	A	A	B		A	A	
Approach Delay (s)		8.9			8.1			10.6			9.3	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.92			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3261			3435						5060	
Flt Permitted		1.00			0.70						1.00	
Satd. Flow (perm)		3261			2490						5060	
Volume (vph)	0	87	96	310	201	0	0	0	0	9	1391	45
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	91	100	323	209	0	0	0	0	9	1449	47
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	173	0	0	532	0	0	0	0	0	1501	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		30.4			30.4						45.2	
Effective Green, g (s)		30.9			30.9						46.1	
Actuated g/C Ratio		0.36			0.36						0.54	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1185			905						2744	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.21						0.30	
v/c Ratio		0.15			0.59						0.55	
Uniform Delay, d1		18.2			21.9						12.7	
Progression Factor		1.00			0.22						1.00	
Incremental Delay, d2		0.0			0.5						0.8	
Delay (s)		18.2			5.4						13.4	
Level of Service		B			A						B	
Approach Delay (s)		18.2			5.4			0.0			13.4	
Approach LOS		B			A			A			B	

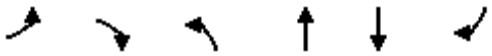
Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	199	0	0	212	11	673	175	114	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	12	212	0	0	226	12	716	186	121	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	223	237	477	546
Volume Left (vph)	12	0	477	239
Volume Right (vph)	0	12	0	121
Hadj (s)	0.04	0.00	0.53	0.10
Departure Headway (s)	6.4	6.3	6.5	6.1
Degree Utilization, x	0.40	0.42	0.86	0.92
Capacity (veh/h)	561	565	549	582
Control Delay (s)	13.5	13.7	36.2	42.8
Approach Delay (s)	13.5	13.7	39.7	
Approach LOS	B	B	E	

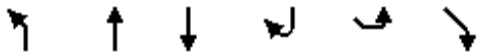
Intersection Summary			
Delay	31.6		
HCM Level of Service	D		
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4835	
Flt Permitted					1.00	
Satd. Flow (perm)					4835	
Volume (vph)	0	0	0	0	1368	666
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	1410	687
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2097	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4835	
v/s Ratio Prot					c0.43	
v/s Ratio Perm						
v/c Ratio					0.43	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.3	
Delay (s)					0.3	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.3	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary					
Delay		0.0			
HCM Level of Service		A			
Intersection Capacity Utilization		0.0%	ICU Level of Service		A
Analysis Period (min)		15			

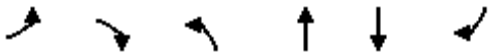
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

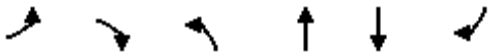
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

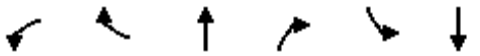
Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

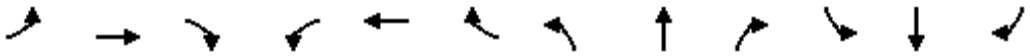
Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.97			
Flt Protected			1.00			
Satd. Flow (prot)			4922			
Flt Permitted			1.00			
Satd. Flow (perm)			4922			
Volume (vph)	0	0	1530	417	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1577	430	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2007	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4922			
v/s Ratio Prot			c0.41			
v/s Ratio Perm						
v/c Ratio			0.41			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.3			
Delay (s)			0.3			
Level of Service			A			
Approach Delay (s)	0.0		0.3		0.0	
Approach LOS	A		A		A	

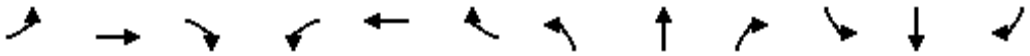
Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	42.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



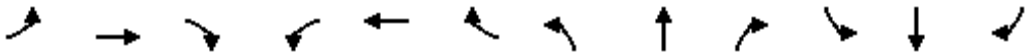
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Volume (vph)	216	1026	195	288	670	120	411	796	257	155	638	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	235	1115	212	313	728	130	447	865	279	168	693	43
RTOR Reduction (vph)	0	0	74	0	11	0	0	0	180	0	6	0
Lane Group Flow (vph)	235	1115	138	313	847	0	447	865	99	168	730	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	11.9	34.1	34.1	14.4	36.6		12.5	29.5	29.5	12.5	29.5	
Effective Green, g (s)	12.9	35.1	35.1	15.4	37.6		12.5	31.0	31.0	12.5	31.0	
Actuated g/C Ratio	0.12	0.32	0.32	0.14	0.34		0.11	0.28	0.28	0.11	0.28	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	403	1129	505	481	1182		390	997	446	201	1421	
v/s Ratio Prot	0.07	c0.32		c0.09	0.24		c0.13	c0.24		c0.09	0.14	
v/s Ratio Perm			0.09						0.06			
v/c Ratio	0.58	0.99	0.27	0.65	0.72		1.15	0.87	0.22	0.84	0.51	
Uniform Delay, d1	46.0	37.2	27.9	44.8	31.6		48.8	37.5	30.3	47.7	33.2	
Progression Factor	0.77	1.32	1.88	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	18.9	0.1	2.8	2.0		91.7	10.1	1.1	24.5	1.3	
Delay (s)	36.7	68.0	52.7	47.6	33.5		140.5	47.7	31.4	72.2	34.5	
Level of Service	D	E	D	D	C		F	D	C	E	C	
Approach Delay (s)		61.2			37.3			70.9			41.5	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM Average Control Delay	55.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.97			0.98				
Flt Protected		1.00			1.00			1.00				
Satd. Flow (prot)		3527			3444			4998				
Flt Permitted		0.87			1.00			1.00				
Satd. Flow (perm)		3079			3444			4998				
Volume (vph)	28	381	0	0	435	96	54	1431	171	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	414	0	0	473	104	59	1555	186	0	0	0
RTOR Reduction (vph)	0	0	0	0	22	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	444	0	0	555	0	0	1786	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		24.7			24.7			55.9				
Effective Green, g (s)		25.2			25.2			56.8				
Actuated g/C Ratio		0.28			0.28			0.63				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		862			964			3154				
v/s Ratio Prot					c0.16							
v/s Ratio Perm		0.14						0.36				
v/c Ratio		0.52			0.58			0.57				
Uniform Delay, d1		27.3			27.8			9.5				
Progression Factor		0.31			1.00			1.37				
Incremental Delay, d2		0.2			0.5			0.7				
Delay (s)		8.7			28.3			13.7				
Level of Service		A			C			B				
Approach Delay (s)		8.7			28.3			13.7			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

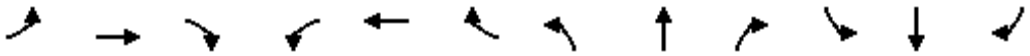


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3468			3474			5040				
Flt Permitted		0.67			1.00			1.00				
Satd. Flow (perm)		2379			3474			5040				
Volume (vph)	129	185	0	0	251	35	81	1384	64	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	133	191	0	0	259	36	84	1427	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	324	0	0	282	0	0	1573	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		16.0			16.0			64.1				
Effective Green, g (s)		17.0			17.0			65.0				
Actuated g/C Ratio		0.19			0.19			0.72				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		449			656			3640				
v/s Ratio Prot					0.08							
v/s Ratio Perm		c0.14						0.31				
v/c Ratio		0.72			0.43			0.43				
Uniform Delay, d1		34.3			32.2			5.0				
Progression Factor		0.24			1.00			0.49				
Incremental Delay, d2		4.4			0.2			0.3				
Delay (s)		12.7			32.4			2.8				
Level of Service		B			C			A				
Approach Delay (s)		12.7			32.4			2.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0		4.0				
Lane Util. Factor		0.95			1.00	1.00		0.91				
Frt		1.00			1.00	0.85		0.99				
Flt Protected		0.99			1.00	1.00		1.00				
Satd. Flow (prot)		3501			1863	1583		5047				
Flt Permitted		0.64			1.00	1.00		1.00				
Satd. Flow (perm)		2275			1863	1583		5047				
Volume (vph)	79	284	0	0	346	87	73	1568	62	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	309	0	0	376	95	79	1704	67	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	18	0	5	0	0	0	0
Lane Group Flow (vph)	0	395	0	0	376	77	0	1845	0	0	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8		8	2					
Actuated Green, G (s)		25.4			25.4	25.4		53.7				
Effective Green, g (s)		27.4			27.4	27.4		54.6				
Actuated g/C Ratio		0.30			0.30	0.30		0.61				
Clearance Time (s)		6.0			6.0	6.0		4.9				
Vehicle Extension (s)		2.0			2.0	2.0		2.0				
Lane Grp Cap (vph)		693			567	482		3062				
v/s Ratio Prot					c0.20							
v/s Ratio Perm		0.17				0.05		0.37				
v/c Ratio		0.57			0.66	0.16		0.60				
Uniform Delay, d1		26.3			27.3	22.9		11.0				
Progression Factor		0.39			1.00	1.00		1.00				
Incremental Delay, d2		0.6			2.3	0.1		0.9				
Delay (s)		10.8			29.5	22.9		11.9				
Level of Service		B			C	C		B				
Approach Delay (s)		10.8			28.2			11.9			0.0	
Approach LOS		B			C			B			A	

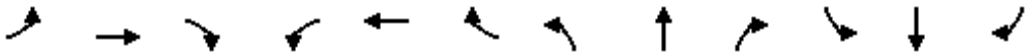
Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

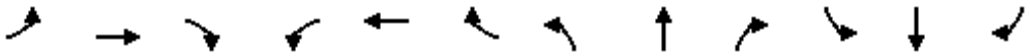
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



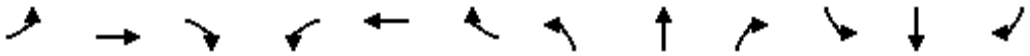
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3503			3336			5010				
Flt Permitted		0.81			1.00			1.00				
Satd. Flow (perm)		2874			3336			5010				
Volume (vph)	18	69	0	0	511	318	34	1261	129	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	19	72	0	0	532	331	35	1314	134	0	0	0
RTOR Reduction (vph)	0	0	0	0	25	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	91	0	0	838	0	0	1469	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		30.4			30.4			45.2				
Effective Green, g (s)		30.9			30.9			46.1				
Actuated g/C Ratio		0.36			0.36			0.54				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		1045			1213			2717				
v/s Ratio Prot					c0.25							
v/s Ratio Perm		0.03						0.29				
v/c Ratio		0.09			0.69			0.54				
Uniform Delay, d1		17.8			23.0			12.6				
Progression Factor		0.38			1.00			1.00				
Incremental Delay, d2		0.0			1.4			0.8				
Delay (s)		6.8			24.4			13.4				
Level of Service		A			C			B				
Approach Delay (s)		6.8			24.4			13.4			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	779	0	535	0	0	0	0	1171	310	472	894	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	803	0	552	0	0	0	0	1207	320	487	922	0
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	803	0	414	0	0	0	0	1207	92	487	922	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	19.0		19.0					24.0	24.0	28.0	56.5	
Effective Green, g (s)	20.0		20.0					24.5	24.5	28.5	57.0	
Actuated g/C Ratio	0.24		0.24					0.29	0.29	0.34	0.67	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	2.0	4.0	
Lane Grp Cap (vph)	808		372					1466	456	593	3410	
v/s Ratio Prot								c0.24		c0.28	0.18	
v/s Ratio Perm	0.23		c0.26						0.06			
v/c Ratio	0.99		1.11					0.82	0.20	0.82	0.27	
Uniform Delay, d1	32.4		32.5					28.2	22.9	25.9	5.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	29.9		81.1					5.4	1.0	8.5	0.2	
Delay (s)	62.4		113.6					33.6	23.9	34.4	5.8	
Level of Service	E		F					C	C	C	A	
Approach Delay (s)		83.3			0.0			31.6			15.7	
Approach LOS		F			A			C			B	

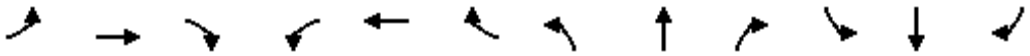
Intersection Summary			
HCM Average Control Delay	42.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

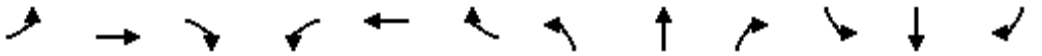
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3456		1770	3494		1770	3349		1770	3452	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3456		1770	3494		1770	3349		1770	3452	
Volume (vph)	40	623	116	113	808	75	132	270	151	116	415	82
Peak-hour factor, PHF	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	54	842	157	153	1092	101	178	365	204	157	561	111
RTOR Reduction (vph)	0	16	0	0	6	0	0	77	0	0	17	0
Lane Group Flow (vph)	54	983	0	153	1187	0	178	492	0	157	655	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.5	33.3		13.5	40.3		9.3	27.0		9.3	27.0	
Effective Green, g (s)	6.5	34.6		13.5	41.6		8.3	27.6		8.3	27.6	
Actuated g/C Ratio	0.06	0.35		0.14	0.42		0.08	0.28		0.08	0.28	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	115	1196		239	1454		147	924		147	953	
v/s Ratio Prot	0.03	c0.28		0.09	c0.34		c0.10	0.15		0.09	c0.19	
v/s Ratio Perm												
v/c Ratio	0.47	0.82		0.64	0.82		1.21	0.53		1.07	0.69	
Uniform Delay, d1	45.1	29.9		41.0	25.8		45.9	30.7		45.9	32.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	6.4		4.3	5.2		141.9	2.2		93.5	4.0	
Delay (s)	46.2	36.3		45.3	31.0		187.8	32.9		139.4	36.4	
Level of Service	D	D		D	C		F	C		F	D	
Approach Delay (s)		36.8			32.6			69.8			55.9	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	45.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



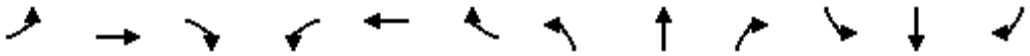
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3489		1770	3491		1770	3438		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3489		1770	3491		1770	3438		1770	1863	1583
Volume (vph)	105	597	62	77	824	82	76	255	60	208	384	290
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	124	702	73	91	969	96	89	300	71	245	452	341
RTOR Reduction (vph)	0	7	0	0	7	0	0	22	0	0	0	136
Lane Group Flow (vph)	124	768	0	91	1058	0	89	349	0	245	452	205
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	10.1	38.3		8.6	36.8		8.3	23.6		11.3	26.6	26.6
Effective Green, g (s)	10.1	39.6		8.6	38.1		8.3	24.5		11.3	27.5	27.5
Actuated g/C Ratio	0.10	0.40		0.09	0.38		0.08	0.24		0.11	0.28	0.28
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	4.9
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.0
Lane Grp Cap (vph)	179	1382		152	1330		147	842		200	512	435
v/s Ratio Prot	c0.07	0.22		0.05	c0.30		0.05	0.10		c0.14	c0.24	
v/s Ratio Perm												0.13
v/c Ratio	0.69	0.56		0.60	0.80		0.61	0.41		1.23	0.88	0.47
Uniform Delay, d1	43.5	23.4		44.0	27.5		44.3	31.7		44.4	34.7	30.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.0	1.6		6.2	5.0		6.9	0.1		137.4	15.9	0.3
Delay (s)	54.5	25.0		50.3	32.5		51.1	31.8		181.7	50.7	30.5
Level of Service	D	C		D	C		D	C		F	D	C
Approach Delay (s)		29.1			33.9			35.6			75.0	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM Average Control Delay	44.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3509		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.40	1.00		0.69	1.00	1.00	0.70	1.00	1.00
Satd. Flow (perm)	466	3539	1583	750	3509		1282	1863	1583	1310	3539	1583
Volume (vph)	3	513	157	119	787	47	164	72	77	78	88	13
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	3	590	180	137	905	54	189	83	89	90	101	15
RTOR Reduction (vph)	0	0	108	0	11	0	0	0	53	0	0	9
Lane Group Flow (vph)	3	590	72	137	948	0	189	83	36	90	101	6
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	300	1404		513	745	633	524	1416	633
v/s Ratio Prot		0.17			c0.27			0.04			0.03	
v/s Ratio Perm	0.01		0.05	0.18			c0.15		0.02	0.07		0.00
v/c Ratio	0.02	0.42	0.11	0.46	0.68		0.37	0.11	0.06	0.17	0.07	0.01
Uniform Delay, d1	7.2	8.6	7.5	8.8	9.9		8.4	7.5	7.4	7.7	7.4	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		2.08	2.11	3.96	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.9	0.4	4.9	2.6		1.8	0.3	0.1	0.7	0.1	0.0
Delay (s)	7.4	9.5	7.9	13.8	12.5		19.4	16.1	29.3	8.4	7.5	7.3
Level of Service	A	A	A	B	B		B	B	C	A	A	A
Approach Delay (s)		9.2			12.6			21.1			7.9	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

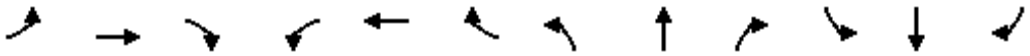


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3469		1770	1863	1583	1770	3417	
Flt Permitted	0.25	1.00	1.00	0.36	1.00		0.33	1.00	1.00	0.36	1.00	
Satd. Flow (perm)	468	1863	1583	667	3469		613	1863	1583	662	3417	
Volume (vph)	74	235	64	88	397	61	67	400	84	54	414	123
Peak-hour factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Adj. Flow (vph)	106	336	91	126	567	87	96	571	120	77	591	176
RTOR Reduction (vph)	0	0	57	0	24	0	0	0	49	0	37	0
Lane Group Flow (vph)	106	336	34	126	630	0	96	571	71	77	730	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	16.6	16.6	16.6	16.6	16.6		35.4	35.4	35.4	35.4	35.4	
Effective Green, g (s)	16.6	16.6	16.6	16.6	16.6		35.4	35.4	35.4	35.4	35.4	
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28		0.59	0.59	0.59	0.59	0.59	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	129	515	438	185	960		362	1099	934	391	2016	
v/s Ratio Prot		0.18			0.18			c0.31			0.21	
v/s Ratio Perm	c0.23		0.02	0.19			0.16		0.04	0.12		
v/c Ratio	0.82	0.65	0.08	0.68	0.66		0.27	0.52	0.08	0.20	0.36	
Uniform Delay, d1	20.3	19.2	16.0	19.3	19.2		6.0	7.3	5.3	5.7	6.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	32.6	3.0	0.1	9.9	1.6		1.8	1.8	0.2	1.1	0.5	
Delay (s)	52.9	22.1	16.1	29.2	20.8		7.8	9.0	5.4	6.8	6.9	
Level of Service	D	C	B	C	C		A	A	A	A	A	
Approach Delay (s)		27.2			22.2			8.3			6.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3434			3491						5046	
Flt Permitted		1.00			0.66						1.00	
Satd. Flow (perm)		3434			2348						5046	
Volume (vph)	0	312	77	135	355	0	0	0	0	39	1497	70
Peak-hour factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	347	86	147	386	0	0	0	0	42	1627	76
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	412	0	0	533	0	0	0	0	0	1739	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		27.2			27.2						53.4	
Effective Green, g (s)		27.7			27.7						54.3	
Actuated g/C Ratio		0.31			0.31						0.60	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1057			723						3044	
v/s Ratio Prot		0.12										
v/s Ratio Perm					c0.23						0.34	
v/c Ratio		0.39			0.74						0.57	
Uniform Delay, d1		24.5			27.9						10.8	
Progression Factor		1.00			0.35						1.00	
Incremental Delay, d2		0.1			3.0						0.8	
Delay (s)		24.6			12.8						11.6	
Level of Service		C			B						B	
Approach Delay (s)		24.6			12.8			0.0			11.6	
Approach LOS		C			B			A			B	

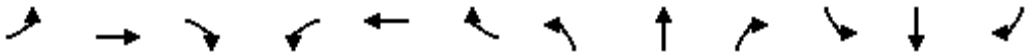
Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1856		1770	1782		1770	1814	
Flt Permitted	0.25	1.00	1.00	0.33	1.00		0.69	1.00		0.69	1.00	
Satd. Flow (perm)	466	1863	1583	606	1856		1293	1782		1293	1814	
Volume (vph)	33	413	13	57	516	13	11	57	23	16	66	14
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	40	498	16	69	622	16	13	69	28	19	80	17
RTOR Reduction (vph)	0	0	10	0	2	0	0	17	0	0	10	0
Lane Group Flow (vph)	40	498	6	69	636	0	13	80	0	19	87	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	186	745	633	242	742		517	713		517	726	
v/s Ratio Prot		0.27			c0.34			0.05			c0.05	
v/s Ratio Perm	0.09		0.00	0.11			0.01			0.01		
v/c Ratio	0.22	0.67	0.01	0.29	0.86		0.03	0.11		0.04	0.12	
Uniform Delay, d1	7.9	9.8	7.2	8.1	11.0		7.3	7.5		7.3	7.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.6	4.7	0.0	2.9	12.2		0.1	0.3		0.1	0.3	
Delay (s)	10.5	14.5	7.3	11.1	23.1		7.4	7.9		7.4	7.9	
Level of Service	B	B	A	B	C		A	A		A	A	
Approach Delay (s)		14.0			22.0			7.8			7.8	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



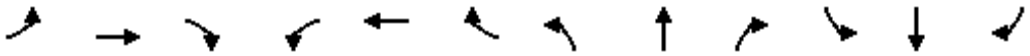
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1817		1770	1830		1770	1817		1770	1827	
Flt Permitted	0.23	1.00		0.26	1.00		0.58	1.00		0.55	1.00	
Satd. Flow (perm)	436	1817		488	1830		1078	1817		1028	1827	
Volume (vph)	29	282	56	26	317	42	59	215	42	48	201	30
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	35	340	67	31	382	51	71	259	51	58	242	36
RTOR Reduction (vph)	0	12	0	0	8	0	0	11	0	0	9	0
Lane Group Flow (vph)	35	395	0	31	425	0	71	299	0	58	269	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.1	17.1		16.1	16.1		34.9	34.9		34.4	34.4	
Effective Green, g (s)	17.1	17.1		17.1	17.1		34.9	34.9		34.9	34.9	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	124	518		139	522		627	1057		598	1063	
v/s Ratio Prot		0.22			c0.23			c0.16			0.15	
v/s Ratio Perm	0.08			0.06			0.07			0.06		
v/c Ratio	0.28	0.76		0.22	0.81		0.11	0.28		0.10	0.25	
Uniform Delay, d1	16.7	19.6		16.4	20.0		5.6	6.3		5.6	6.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	6.6		0.8	9.5		0.4	0.7		0.3	0.6	
Delay (s)	17.9	26.1		17.2	29.4		6.0	7.0		5.9	6.7	
Level of Service	B	C		B	C		A	A		A	A	
Approach Delay (s)		25.5			28.6			6.8			6.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1813		1770	1802		1770	1863	1583	1770	1844	
Flt Permitted	0.48	1.00		0.62	1.00		0.38	1.00	1.00	0.46	1.00	
Satd. Flow (perm)	897	1813		1158	1802		709	1863	1583	856	1844	
Volume (vph)	8	165	36	130	257	72	62	346	117	78	384	28
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	179	39	141	279	78	67	376	127	85	417	30
RTOR Reduction (vph)	0	20	0	0	25	0	0	0	76	0	7	0
Lane Group Flow (vph)	9	198	0	141	332	0	67	376	51	85	440	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	359	725		463	721		284	745	633	342	738	
v/s Ratio Prot		0.11			c0.18			0.20			c0.24	
v/s Ratio Perm	0.01			0.12			0.09		0.03	0.10		
v/c Ratio	0.03	0.27		0.30	0.46		0.24	0.50	0.08	0.25	0.60	
Uniform Delay, d1	7.3	8.1		8.2	8.8		8.0	9.0	7.4	8.0	9.5	
Progression Factor	1.00	1.00		1.00	1.00		1.28	1.33	2.97	0.99	1.06	
Incremental Delay, d2	0.1	0.9		1.7	2.1		1.9	2.3	0.2	1.7	3.5	
Delay (s)	7.4	9.0		9.9	10.9		12.0	14.3	22.3	9.6	13.5	
Level of Service	A	A		A	B		B	B	C	A	B	
Approach Delay (s)		9.0			10.6			15.8			12.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



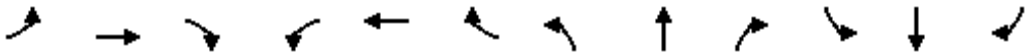
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1817		1770	1786		1770	3470		1770	3437	
Flt Permitted	0.46	1.00		0.64	1.00		0.42	1.00		0.48	1.00	
Satd. Flow (perm)	858	1817		1184	1786		780	3470		902	3437	
Volume (vph)	56	149	29	67	250	95	75	373	56	81	420	100
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	162	32	73	272	103	82	405	61	88	457	109
RTOR Reduction (vph)	0	18	0	0	34	0	0	30	0	0	52	0
Lane Group Flow (vph)	61	176	0	73	341	0	82	436	0	88	514	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	343	727		474	714		312	1388		361	1375	
v/s Ratio Prot		0.10			c0.19			0.13			c0.15	
v/s Ratio Perm	0.07			0.06			0.11			0.10		
v/c Ratio	0.18	0.24		0.15	0.48		0.26	0.31		0.24	0.37	
Uniform Delay, d1	7.8	8.0		7.7	8.9		8.0	8.2		8.0	8.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.8		0.7	2.3		2.0	0.6		1.6	0.8	
Delay (s)	8.9	8.8		8.4	11.2		10.1	8.8		9.6	9.2	
Level of Service	A	A		A	B		B	A		A	A	
Approach Delay (s)		8.8			10.7			9.0			9.3	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

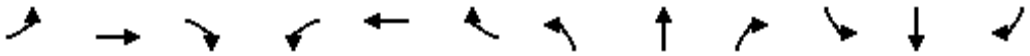
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3407			3502						5026	
Flt Permitted		1.00			0.73						1.00	
Satd. Flow (perm)		3407			2594						5026	
Volume (vph)	0	256	85	62	227	0	0	0	0	25	1342	107
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	92	67	247	0	0	0	0	27	1459	116
RTOR Reduction (vph)	0	37	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	333	0	0	314	0	0	0	0	0	1593	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		18.9			18.9						61.2	
Effective Green, g (s)		19.9			19.9						62.1	
Actuated g/C Ratio		0.22			0.22						0.69	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		753			574						3468	
v/s Ratio Prot		0.10										
v/s Ratio Perm					c0.12						0.32	
v/c Ratio		0.44			0.55						0.46	
Uniform Delay, d1		30.3			31.1						6.3	
Progression Factor		1.00			0.35						1.68	
Incremental Delay, d2		0.2			0.5						0.4	
Delay (s)		30.4			11.4						11.0	
Level of Service		C			B						B	
Approach Delay (s)		30.4			11.4			0.0			11.0	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1753		1770	1814		1770	3490		1770	3515	
Flt Permitted	0.65	1.00		0.62	1.00		0.42	1.00		0.44	1.00	
Satd. Flow (perm)	1215	1753		1152	1814		775	3490		827	3515	
Volume (vph)	46	124	80	80	125	26	72	438	45	10	495	24
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	51	136	88	88	137	29	79	481	49	11	544	26
RTOR Reduction (vph)	0	53	0	0	17	0	0	19	0	0	8	0
Lane Group Flow (vph)	51	171	0	88	149	0	79	511	0	11	562	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	486	701		461	726		310	1396		331	1406	
v/s Ratio Prot		c0.10			0.08			0.15			c0.16	
v/s Ratio Perm	0.04			0.08			0.10			0.01		
v/c Ratio	0.10	0.24		0.19	0.20		0.25	0.37		0.03	0.40	
Uniform Delay, d1	7.5	8.0		7.8	7.8		8.0	8.4		7.3	8.6	
Progression Factor	1.00	1.00		1.00	1.00		0.91	0.94		0.85	0.98	
Incremental Delay, d2	0.4	0.8		0.9	0.6		1.9	0.7		0.2	0.7	
Delay (s)	7.9	8.8		8.7	8.5		9.2	8.6		6.3	9.1	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		8.6			8.6			8.7			9.1	
Approach LOS		A			A			A			A	

Intersection Summary					
HCM Average Control Delay	8.8	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.32				
Actuated Cycle Length (s)	40.0	Sum of lost time (s)		8.0	
Intersection Capacity Utilization	47.6%	ICU Level of Service		A	
Analysis Period (min)	15				

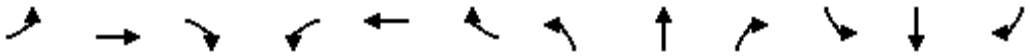
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3416		1770	1833		1770	1770	
Flt Permitted	0.42	1.00	1.00	0.60	1.00		0.46	1.00		0.52	1.00	
Satd. Flow (perm)	787	1863	1583	1117	3416		866	1833		970	1770	
Volume (vph)	99	153	48	54	276	84	55	295	36	58	268	133
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	111	172	54	61	310	94	62	331	40	65	301	149
RTOR Reduction (vph)	0	0	42	0	60	0	0	5	0	0	20	0
Lane Group Flow (vph)	111	172	12	61	344	0	62	366	0	65	430	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	12.9	12.9	12.9	12.9	12.9		39.1	39.1		39.1	39.1	
Effective Green, g (s)	12.9	12.9	12.9	12.9	12.9		39.1	39.1		39.1	39.1	
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22		0.65	0.65		0.65	0.65	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	169	401	340	240	734		564	1195		632	1153	
v/s Ratio Prot		0.09			0.10			0.20			c0.24	
v/s Ratio Perm	c0.14		0.01	0.05			0.07			0.07		
v/c Ratio	0.66	0.43	0.03	0.25	0.47		0.11	0.31		0.10	0.37	
Uniform Delay, d1	21.5	20.4	18.6	19.6	20.6		3.9	4.5		3.9	4.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.9	0.7	0.0	0.6	0.5		0.4	0.7		0.3	0.9	
Delay (s)	30.4	21.1	18.7	20.1	21.0		4.3	5.2		4.2	5.7	
Level of Service	C	C	B	C	C		A	A		A	A	
Approach Delay (s)		23.8			20.9			5.1			5.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						1.00	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3412			3496						5058	
Flt Permitted		1.00			0.71						1.00	
Satd. Flow (perm)		3412			2505						5058	
Volume (vph)	0	239	75	114	342	0	0	0	0	25	1521	48
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	260	82	124	372	0	0	0	0	27	1653	52
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	316	0	0	496	0	0	0	0	0	1729	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		20.0			20.0						59.1	
Effective Green, g (s)		22.0			22.0						60.0	
Actuated g/C Ratio		0.24			0.24						0.67	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		834			612						3372	
v/s Ratio Prot		0.09										
v/s Ratio Perm					c0.20						0.34	
v/c Ratio		0.38			0.81						0.51	
Uniform Delay, d1		28.3			32.0						7.6	
Progression Factor		1.00			0.39						0.35	
Incremental Delay, d2		0.1			6.9						0.5	
Delay (s)		28.4			19.5						3.1	
Level of Service		C			B						A	
Approach Delay (s)		28.4			19.5			0.0			3.1	
Approach LOS		C			B			A			A	

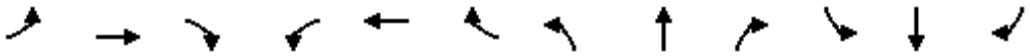
Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	36	196	0	0	289	27	33	110	9	23	0	51
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	45	245	0	0	361	34	41	138	11	29	0	64

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	290	395	41	149	93
Volume Left (vph)	45	0	41	0	29
Volume Right (vph)	0	34	0	11	64
Hadj (s)	0.07	-0.02	0.53	-0.02	-0.32
Departure Headway (s)	5.5	5.2	7.0	6.5	6.0
Degree Utilization, x	0.44	0.57	0.08	0.27	0.15
Capacity (veh/h)	620	660	456	494	513
Control Delay (s)	12.7	15.0	9.5	10.6	10.0
Approach Delay (s)	12.7	15.0	10.4		10.0
Approach LOS	B	C	B		B

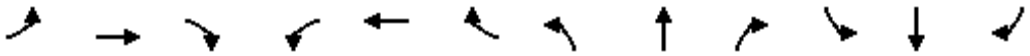
Intersection Summary				
Delay	12.9			
HCM Level of Service	B			
Intersection Capacity Utilization	50.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	56	148	22	22	233	67	38	253	26	66	215	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	61	161	24	24	253	73	41	275	28	72	234	73

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	246	350	345	378
Volume Left (vph)	61	24	41	72
Volume Right (vph)	24	73	28	73
Hadj (s)	0.03	-0.08	0.01	-0.04
Departure Headway (s)	7.8	7.4	7.4	7.2
Degree Utilization, x	0.53	0.72	0.71	0.76
Capacity (veh/h)	398	456	452	470
Control Delay (s)	19.4	26.7	26.3	29.7
Approach Delay (s)	19.4	26.7	26.3	29.7
Approach LOS	C	D	D	D

Intersection Summary			
Delay	26.1		
HCM Level of Service	D		
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1831		1770	1863	1583	1770	3478		1770	3494	
Flt Permitted	0.63	1.00		0.64	1.00	1.00	0.30	1.00		0.41	1.00	
Satd. Flow (perm)	1177	1831		1186	1863	1583	561	3478		756	3494	
Volume (vph)	48	156	20	50	185	48	32	476	63	22	635	60
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	170	22	54	201	52	35	517	68	24	690	65
RTOR Reduction (vph)	0	11	0	0	0	31	0	25	0	0	17	0
Lane Group Flow (vph)	52	181	0	54	201	21	35	560	0	24	738	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	471	732		474	745	633	224	1391		302	1398	
v/s Ratio Prot		0.10			c0.11			0.16			c0.21	
v/s Ratio Perm	0.04			0.05		0.01	0.06			0.03		
v/c Ratio	0.11	0.25		0.11	0.27	0.03	0.16	0.40		0.08	0.53	
Uniform Delay, d1	7.5	8.0		7.5	8.1	7.3	7.7	8.6		7.4	9.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.83	0.96	
Incremental Delay, d2	0.5	0.8		0.5	0.9	0.1	1.5	0.9		0.5	1.4	
Delay (s)	8.0	8.8		8.0	9.0	7.4	9.2	9.5		6.7	10.2	
Level of Service	A	A		A	A	A	A	A		A	B	
Approach Delay (s)		8.6			8.5			9.4			10.1	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

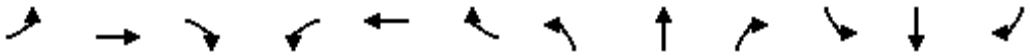
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.90			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3189			3434						5068	
Flt Permitted		1.00			0.70						1.00	
Satd. Flow (perm)		3189			2464						5068	
Volume (vph)	0	66	128	373	237	0	0	0	0	14	1675	35
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	72	139	405	258	0	0	0	0	15	1821	38
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	203	0	0	663	0	0	0	0	0	1871	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		28.3			28.3						42.3	
Effective Green, g (s)		28.8			28.8						43.2	
Actuated g/C Ratio		0.36			0.36						0.54	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1148			887						2737	
v/s Ratio Prot		0.06										
v/s Ratio Perm					c0.27						0.37	
v/c Ratio		0.18			0.98dl						0.68	
Uniform Delay, d1		17.5			22.4						13.4	
Progression Factor		1.00			0.27						1.00	
Incremental Delay, d2		0.0			2.1						1.4	
Delay (s)		17.5			8.1						14.8	
Level of Service		B			A						B	
Approach Delay (s)		17.5			8.1			0.0			14.8	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

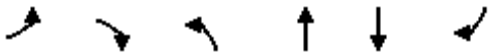
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	141	0	0	250	9	609	154	67	0	0	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	13	172	0	0	305	11	743	188	82	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	185	316	495	517
Volume Left (vph)	13	0	495	248
Volume Right (vph)	0	11	0	82
Hadj (s)	0.05	0.01	0.53	0.16
Departure Headway (s)	6.6	6.2	6.6	6.3
Degree Utilization, x	0.34	0.55	0.91	0.90
Capacity (veh/h)	543	570	531	572
Control Delay (s)	12.9	16.6	44.3	40.4
Approach Delay (s)	12.9	16.6	42.3	
Approach LOS	B	C	E	

Intersection Summary			
Delay	33.3		
HCM Level of Service	D		
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4843	
Flt Permitted					1.00	
Satd. Flow (perm)					4843	
Volume (vph)	0	0	0	0	1481	689
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1610	749
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2359	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4843	
v/s Ratio Prot					c0.49	
v/s Ratio Perm						
v/c Ratio					0.49	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.4	
Delay (s)					0.4	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.4	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.96			
Flt Protected			1.00			
Satd. Flow (prot)			4884			
Flt Permitted			1.00			
Satd. Flow (perm)			4884			
Volume (vph)	0	0	1101	394	0	0
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	1210	433	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1643	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4884			
v/s Ratio Prot			c0.34			
v/s Ratio Perm						
v/c Ratio			0.34			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.2			
Delay (s)			0.2			
Level of Service			A			
Approach Delay (s)	0.0		0.2		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

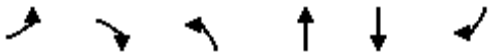
Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

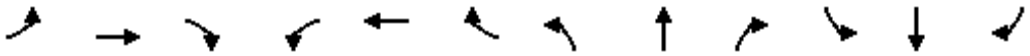


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3512		3433	3539	1583	1770	5005	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3512		3433	3539	1583	1770	5005	
Volume (vph)	205	458	138	337	764	41	206	521	149	146	1193	141
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	498	150	366	830	45	224	566	162	159	1297	153
RTOR Reduction (vph)	0	0	110	0	4	0	0	0	108	0	12	0
Lane Group Flow (vph)	223	498	40	366	871	0	224	566	54	159	1438	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	11.5	28.2	28.2	13.3	30.0		11.5	35.5	35.5	13.5	37.5	
Effective Green, g (s)	12.5	29.2	29.2	14.3	31.0		11.5	37.0	37.0	13.5	39.0	
Actuated g/C Ratio	0.11	0.27	0.27	0.13	0.28		0.10	0.34	0.34	0.12	0.35	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	390	939	420	446	990		359	1190	532	217	1775	
v/s Ratio Prot	0.06	0.14		c0.11	c0.25		c0.07	0.16		0.09	c0.29	
v/s Ratio Perm			0.03						0.03			
v/c Ratio	0.57	0.53	0.09	0.82	0.88		0.62	0.48	0.10	0.73	0.81	
Uniform Delay, d1	46.2	34.5	30.4	46.6	37.7		47.2	28.8	25.1	46.5	32.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.4	0.1	11.3	9.2		2.9	1.4	0.4	11.4	4.1	
Delay (s)	47.9	35.0	30.5	57.9	46.9		50.1	30.2	25.5	57.9	36.3	
Level of Service	D	C	C	E	D		D	C	C	E	D	
Approach Delay (s)		37.5			50.1			34.1			38.4	
Approach LOS		D			D			C			D	

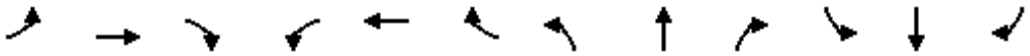
Intersection Summary			
HCM Average Control Delay	40.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			0.98				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3519			3500			4968				
Flt Permitted		0.83			1.00			1.00				
Satd. Flow (perm)		2936			3500			4968				
Volume (vph)	36	276	0	0	490	39	82	917	151	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	300	0	0	533	42	89	997	164	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	339	0	0	569	0	0	1227	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		27.2			27.2			53.4				
Effective Green, g (s)		27.7			27.7			54.3				
Actuated g/C Ratio		0.31			0.31			0.60				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		904			1077			2997				
v/s Ratio Prot					c0.16							
v/s Ratio Perm		0.12						0.25				
v/c Ratio		0.38			0.53			0.41				
Uniform Delay, d1		24.4			25.7			9.4				
Progression Factor		0.32			1.00			0.91				
Incremental Delay, d2		0.1			0.2			0.4				
Delay (s)		8.0			26.0			8.9				
Level of Service		A			C			A				
Approach Delay (s)		8.0			26.0			8.9			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

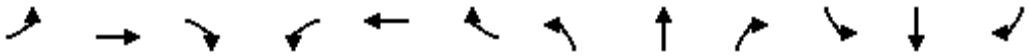
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3480			3487			5051				
Flt Permitted		0.66			1.00			1.00				
Satd. Flow (perm)		2354			3487			5051				
Volume (vph)	96	185	0	0	289	31	70	901	22	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	104	201	0	0	314	34	76	979	24	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	305	0	0	339	0	0	1077	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		18.9			18.9			61.2				
Effective Green, g (s)		19.9			19.9			62.1				
Actuated g/C Ratio		0.22			0.22			0.69				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		520			771			3485				
v/s Ratio Prot					0.10							
v/s Ratio Perm		c0.13						0.21				
v/c Ratio		0.59			0.44			0.31				
Uniform Delay, d1		31.4			30.2			5.5				
Progression Factor		0.32			1.00			0.67				
Incremental Delay, d2		1.0			0.1			0.2				
Delay (s)		11.1			30.4			3.9				
Level of Service		B			C			A				
Approach Delay (s)		11.1			30.4			3.9			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



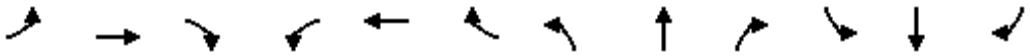
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			1.00				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3497			3468			5046				
Flt Permitted		0.68			1.00			1.00				
Satd. Flow (perm)		2422			3468			5046				
Volume (vph)	61	190	0	0	365	57	91	1099	33	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	66	207	0	0	397	62	99	1195	36	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	273	0	0	445	0	0	1327	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.0			20.0			59.1				
Effective Green, g (s)		22.0			22.0			60.0				
Actuated g/C Ratio		0.24			0.24			0.67				
Clearance Time (s)		6.0			6.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		592			848			3364				
v/s Ratio Prot					c0.13							
v/s Ratio Perm		0.11						0.26				
v/c Ratio		0.46			0.52			0.39				
Uniform Delay, d1		29.0			29.5			6.8				
Progression Factor		0.28			1.00			1.00				
Incremental Delay, d2		0.2			0.3			0.3				
Delay (s)		8.2			29.7			7.1				
Level of Service		A			C			A				
Approach Delay (s)		8.2			29.7			7.1			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	12.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	497	0	237	0	0	0	0	995	364	595	881	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	558	0	266	0	0	0	0	1118	409	669	990	0
RTOR Reduction (vph)	0	0	125	0	0	0	0	0	293	0	0	0
Lane Group Flow (vph)	558	0	141	0	0	0	0	1118	116	669	990	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	16.2		16.2					22.2	22.2	27.6	54.3	
Effective Green, g (s)	17.2		17.2					22.7	22.7	28.1	54.8	
Actuated g/C Ratio	0.21		0.21					0.28	0.28	0.35	0.68	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	738		340					1443	449	622	3483	
v/s Ratio Prot								c0.22		c0.38	0.19	
v/s Ratio Perm	c0.16		0.09						0.07			
v/c Ratio	0.76		0.42					0.77	0.26	1.08	0.28	
Uniform Delay, d1	29.4		27.1					26.3	22.1	25.9	4.9	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.4		0.8					4.1	1.4	58.1	0.2	
Delay (s)	33.9		27.9					30.4	23.5	84.1	5.1	
Level of Service	C		C					C	C	F	A	
Approach Delay (s)		31.9			0.0			28.6			37.0	
Approach LOS		C			A			C			D	

Intersection Summary			
HCM Average Control Delay	32.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

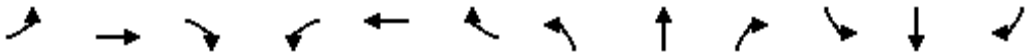
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

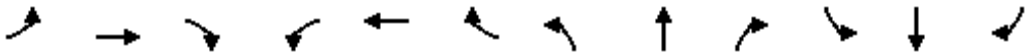
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

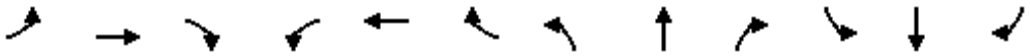
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.96			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3497			3382			5004				
Flt Permitted		0.80			1.00			1.00				
Satd. Flow (perm)		2814			3382			5004				
Volume (vph)	16	50	0	0	610	258	29	867	97	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	54	0	0	663	280	32	942	105	0	0	0
RTOR Reduction (vph)	0	0	0	0	57	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	71	0	0	886	0	0	1062	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.3			28.3			42.3				
Effective Green, g (s)		28.8			28.8			43.2				
Actuated g/C Ratio		0.36			0.36			0.54				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		1013			1218			2702				
v/s Ratio Prot					c0.26							
v/s Ratio Perm		0.03						0.21				
v/c Ratio		0.07			0.73			0.39				
Uniform Delay, d1		16.8			22.2			10.7				
Progression Factor		0.42			1.00			1.00				
Incremental Delay, d2		0.0			1.9			0.4				
Delay (s)		7.0			24.1			11.2				
Level of Service		A			C			B				
Approach Delay (s)		7.0			24.1			11.2			0.0	
Approach LOS		A			C			B			A	

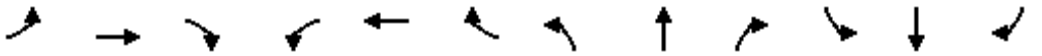
Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX C- EXISTING PLUS PROJECT LOS RESULTS



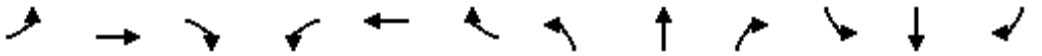
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3494		1770	3487		1770	3382		1770	3402	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3494		1770	3487		1770	3382		1770	3402	
Volume (vph)	120	1180	110	90	920	100	130	380	160	100	260	90
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	125	1229	115	94	958	104	135	396	167	104	271	94
RTOR Reduction (vph)	0	5	0	0	7	0	0	44	0	0	33	0
Lane Group Flow (vph)	125	1339	0	94	1055	0	135	519	0	104	332	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	11.7	54.0		8.5	50.8		9.2	22.1		8.5	21.4	
Effective Green, g (s)	11.7	55.3		8.5	52.1		8.2	22.7		7.5	22.0	
Actuated g/C Ratio	0.11	0.50		0.08	0.47		0.07	0.21		0.07	0.20	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	188	1757		137	1652		132	698		121	680	
v/s Ratio Prot	c0.07	c0.38		0.05	0.30		c0.08	c0.15		0.06	0.10	
v/s Ratio Perm												
v/c Ratio	0.66	0.76		0.69	0.64		1.02	0.74		0.86	0.49	
Uniform Delay, d1	47.3	22.0		49.5	21.8		50.9	40.9		50.7	39.0	
Progression Factor	1.00	1.00		0.96	0.75		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.7	3.2		5.2	0.9		84.5	4.6		40.5	0.2	
Delay (s)	54.0	25.2		52.8	17.2		135.4	45.5		91.2	39.2	
Level of Service	D	C		D	B		F	D		F	D	
Approach Delay (s)		27.7			20.1			62.9			50.7	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3501		1770	3430		1770	3426		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3501		1770	3430		1770	3426		1770	1863	1583
Volume (vph)	170	900	70	90	850	220	110	370	100	210	290	210
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	938	73	94	885	229	115	385	104	219	302	219
RTOR Reduction (vph)	0	5	0	0	21	0	0	25	0	0	0	123
Lane Group Flow (vph)	177	1006	0	94	1093	0	115	464	0	219	302	96
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												6
Actuated Green, G (s)	18.0	50.1		9.3	41.4		10.3	21.1		11.3	22.1	41.4
Effective Green, g (s)	18.0	51.4		9.3	42.7		10.3	22.0		11.3	23.0	42.7
Actuated g/C Ratio	0.16	0.47		0.08	0.39		0.09	0.20		0.10	0.21	0.39
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	5.3
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.5
Lane Grp Cap (vph)	290	1636		150	1331		166	685		182	390	614
v/s Ratio Prot	c0.10	0.29		0.05	c0.32		0.06	0.14		c0.12	c0.16	
v/s Ratio Perm												0.06
v/c Ratio	0.61	0.62		0.63	0.82		0.69	0.68		1.20	0.77	0.16
Uniform Delay, d1	42.7	21.9		48.7	30.2		48.3	40.7		49.4	41.1	21.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.8	1.7		7.9	5.8		11.8	2.1		132.0	8.5	0.5
Delay (s)	46.5	23.6		56.6	36.0		60.1	42.8		181.4	49.5	22.5
Level of Service	D	C		E	D		E	D		F	D	C
Approach Delay (s)		27.1			37.6			46.1			80.5	
Approach LOS		C			D			D			F	

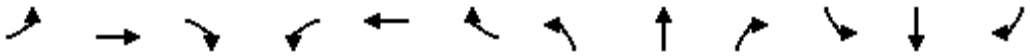
Intersection Summary			
HCM Average Control Delay	44.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3477		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.69	1.00	1.00	0.66	1.00	1.00
Satd. Flow (perm)	466	3539	1583	466	3477		1288	1863	1583	1221	3539	1583
Volume (vph)	30	1120	190	70	750	100	260	150	170	120	90	20
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	32	1191	202	74	798	106	277	160	181	128	96	21
RTOR Reduction (vph)	0	0	121	0	26	0	0	0	11	0	0	13
Lane Group Flow (vph)	32	1191	81	74	878	0	277	160	170	128	96	8
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	186	1391		515	745	633	488	1416	633
v/s Ratio Prot		c0.34			0.25			0.09			0.03	
v/s Ratio Perm	0.07		0.05	0.16			c0.21		0.11	0.10		0.01
v/c Ratio	0.17	0.84	0.13	0.40	0.63		0.54	0.21	0.27	0.26	0.07	0.01
Uniform Delay, d1	7.7	10.9	7.6	8.6	9.6		9.2	7.9	8.1	8.0	7.4	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.38	0.43	0.37	1.00	1.00	1.00
Incremental Delay, d2	2.0	6.2	0.4	6.2	2.2		3.1	0.5	0.8	1.3	0.1	0.0
Delay (s)	9.7	17.0	8.0	14.8	11.8		6.6	3.9	3.8	9.4	7.5	7.3
Level of Service	A	B	A	B	B		A	A	A	A	A	A
Approach Delay (s)		15.6			12.0			5.1			8.4	
Approach LOS		B			B			A			A	

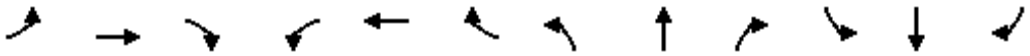
Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3473		1770	1863	1583	1770	3484	
Flt Permitted	0.51	1.00	1.00	0.25	1.00		0.51	1.00	1.00	0.41	1.00	
Satd. Flow (perm)	956	1863	1583	460	3473		942	1863	1583	768	3484	
Volume (vph)	90	390	80	40	280	40	40	430	60	40	340	40
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	433	89	44	311	44	44	478	67	44	378	44
RTOR Reduction (vph)	0	0	42	0	21	0	0	0	29	0	13	0
Lane Group Flow (vph)	100	433	47	44	334	0	44	478	38	44	409	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0		34.0	34.0	34.0	34.0	34.0	
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0		34.0	34.0	34.0	34.0	34.0	
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30		0.57	0.57	0.57	0.57	0.57	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	287	559	475	138	1042		534	1056	897	435	1974	
v/s Ratio Prot		c0.23			0.10			c0.26			0.12	
v/s Ratio Perm	0.10		0.03	0.10			0.05		0.02	0.06		
v/c Ratio	0.35	0.77	0.10	0.32	0.32		0.08	0.45	0.04	0.10	0.21	
Uniform Delay, d1	16.4	19.2	15.1	16.3	16.3		5.9	7.6	5.8	6.0	6.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	6.6	0.1	1.3	0.2		0.3	1.4	0.1	0.5	0.2	
Delay (s)	17.2	25.8	15.2	17.6	16.4		6.2	9.0	5.9	6.4	6.6	
Level of Service	B	C	B	B	B		A	A	A	A	A	
Approach Delay (s)		22.9			16.6			8.4			6.6	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

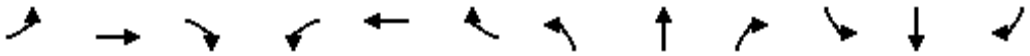


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		3427			3483						5028	
Flt Permitted		1.00			0.58						1.00	
Satd. Flow (perm)		3427			2041						5028	
Volume (vph)	0	410	110	140	290	0	0	0	0	60	1060	70
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	120	152	315	0	0	0	0	65	1152	76
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	537	0	0	467	0	0	0	0	0	1286	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		24.7			24.7						55.9	
Effective Green, g (s)		25.2			25.2						56.8	
Actuated g/C Ratio		0.28			0.28						0.63	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		960			571						3173	
v/s Ratio Prot		0.16										
v/s Ratio Perm					c0.23						0.26	
v/c Ratio		0.56			0.93dl						0.41	
Uniform Delay, d1		27.7			30.3						8.2	
Progression Factor		1.00			0.30						1.00	
Incremental Delay, d2		0.4			7.4						0.4	
Delay (s)		28.1			16.5						8.6	
Level of Service		C			B						A	
Approach Delay (s)		28.1			16.5			0.0			8.6	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

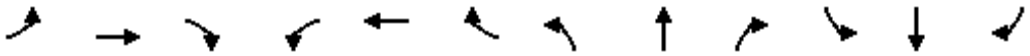
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



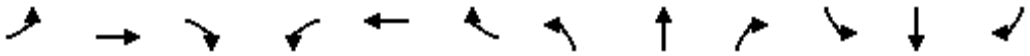
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1858		1770	1752		1770	1782	
Flt Permitted	0.20	1.00	1.00	0.20	1.00		0.71	1.00		0.66	1.00	
Satd. Flow (perm)	373	1863	1583	373	1858		1322	1752		1226	1782	
Volume (vph)	20	550	40	30	530	10	30	90	60	20	50	20
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	573	42	31	552	10	31	94	62	21	52	21
RTOR Reduction (vph)	0	0	30	0	1	0	0	25	0	0	8	0
Lane Group Flow (vph)	21	573	12	31	561	0	31	131	0	21	65	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.60	0.60		0.60	0.60	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	107	532	452	107	531		793	1051		736	1069	
v/s Ratio Prot		c0.31			0.30			c0.07			0.04	
v/s Ratio Perm	0.06		0.01	0.08			0.02			0.02		
v/c Ratio	0.20	1.08	0.03	0.29	1.06		0.04	0.12		0.03	0.06	
Uniform Delay, d1	18.9	25.0	18.0	19.5	25.0		5.7	6.1		5.7	5.8	
Progression Factor	1.00	1.00	1.00	0.98	1.10		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	61.4	0.0	1.2	51.5		0.1	0.2		0.1	0.1	
Delay (s)	19.8	86.4	18.0	20.3	79.1		5.8	6.3		5.8	5.9	
Level of Service	B	F	B	C	E		A	A		A	A	
Approach Delay (s)		79.7			76.0			6.2			5.9	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	64.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1841		1770	1821		1770	1821		1770	1831	
Flt Permitted	0.16	1.00		0.18	1.00		0.40	1.00		0.35	1.00	
Satd. Flow (perm)	289	1841		330	1821		750	1821		649	1831	
Volume (vph)	80	480	40	80	460	80	40	340	60	50	310	40
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	95	571	48	95	548	95	48	405	71	60	369	48
RTOR Reduction (vph)	0	6	0	0	12	0	0	7	0	0	5	0
Lane Group Flow (vph)	95	613	0	95	631	0	48	469	0	60	412	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	29.4	29.4		28.4	28.4		32.6	32.6		32.1	32.1	
Effective Green, g (s)	29.4	29.4		29.4	29.4		32.6	32.6		32.6	32.6	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.47	0.47		0.47	0.47	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	121	773		139	765		349	848		302	853	
v/s Ratio Prot		0.33			c0.35			c0.26			0.22	
v/s Ratio Perm	0.33			0.29			0.06			0.09		
v/c Ratio	0.79	0.79		0.68	0.82		0.14	0.55		0.20	0.48	
Uniform Delay, d1	17.6	17.7		16.5	18.0		10.7	13.5		11.0	12.9	
Progression Factor	2.03	1.80		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.0	2.6		13.0	7.2		0.8	2.6		1.5	2.0	
Delay (s)	49.6	34.4		29.5	25.2		11.5	16.1		12.5	14.8	
Level of Service	D	C		C	C		B	B		B	B	
Approach Delay (s)		36.4			25.8			15.6			14.5	
Approach LOS		D			C			B			B	

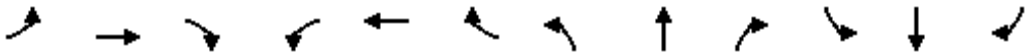
Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1797		1770	1780		1770	1863	1583	1770	1850	
Flt Permitted	0.47	1.00		0.47	1.00		0.36	1.00	1.00	0.31	1.00	
Satd. Flow (perm)	869	1797		869	1780		666	1863	1583	580	1850	
Volume (vph)	20	260	80	80	240	100	30	470	140	90	410	20
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	283	87	87	261	109	33	511	152	98	446	22
RTOR Reduction (vph)	0	28	0	0	38	0	0	0	91	0	4	0
Lane Group Flow (vph)	22	342	0	87	332	0	33	511	61	98	464	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	348	719		348	712		266	745	633	232	740	
v/s Ratio Prot		c0.19			0.19			c0.27			0.25	
v/s Ratio Perm	0.03			0.10			0.05		0.04	0.17		
v/c Ratio	0.06	0.48		0.25	0.47		0.12	0.69	0.10	0.42	0.63	
Uniform Delay, d1	7.4	8.9		8.0	8.9		7.6	9.9	7.5	8.7	9.6	
Progression Factor	1.00	1.00		1.00	1.00		1.16	1.27	2.89	1.06	1.05	
Incremental Delay, d2	0.3	2.3		1.7	2.2		0.9	4.6	0.3	5.5	4.0	
Delay (s)	7.7	11.1		9.7	11.0		9.7	17.3	21.9	14.7	14.1	
Level of Service	A	B		A	B		A	B	C	B	B	
Approach Delay (s)		11.0			10.8			17.9			14.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

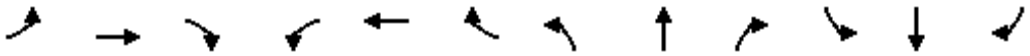
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.96		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1787		1770	3456		1770	3496	
Flt Permitted	0.61	1.00		0.48	1.00		0.44	1.00		0.43	1.00	
Satd. Flow (perm)	1136	1795		892	1787		824	3456		795	3496	
Volume (vph)	70	250	80	70	160	60	40	430	80	60	450	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	272	87	76	174	65	43	467	87	65	489	43
RTOR Reduction (vph)	0	29	0	0	34	0	0	38	0	0	16	0
Lane Group Flow (vph)	76	330	0	76	205	0	43	516	0	65	516	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	454	718		357	715		330	1382		318	1398	
v/s Ratio Prot		c0.18			0.11			c0.15			0.15	
v/s Ratio Perm	0.07			0.09			0.05			0.08		
v/c Ratio	0.17	0.46		0.21	0.29		0.13	0.37		0.20	0.37	
Uniform Delay, d1	7.7	8.8		7.9	8.1		7.6	8.5		7.8	8.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	2.1		1.4	1.0		0.8	0.8		1.4	0.8	
Delay (s)	8.5	10.9		9.2	9.1		8.4	9.2		9.3	9.2	
Level of Service	A	B		A	A		A	A		A	A	
Approach Delay (s)		10.5			9.2			9.2			9.2	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

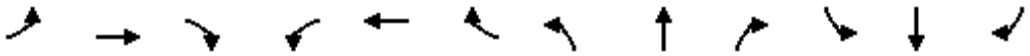


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3444			3421						5042	
Flt Permitted		1.00			0.63						1.00	
Satd. Flow (perm)		3444			2214						5042	
Volume (vph)	0	320	70	180	80	0	0	0	0	20	1100	60
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	330	72	186	82	0	0	0	0	21	1134	62
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	380	0	0	268	0	0	0	0	0	1212	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		16.2			16.2						63.9	
Effective Green, g (s)		17.2			17.2						64.8	
Actuated g/C Ratio		0.19			0.19						0.72	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		658			423						3630	
v/s Ratio Prot		0.11										
v/s Ratio Perm					c0.12						0.24	
v/c Ratio		0.58			1.31dl						0.33	
Uniform Delay, d1		33.1			33.5						4.6	
Progression Factor		1.00			0.37						1.33	
Incremental Delay, d2		0.8			2.2						0.2	
Delay (s)		33.9			14.4						6.4	
Level of Service		C			B						A	
Approach Delay (s)		33.9			14.4			0.0			6.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

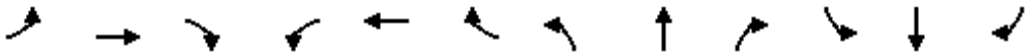
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

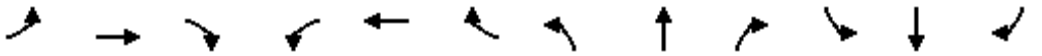
Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1774		1770	1811		1770	3461		1770	3486	
Flt Permitted	0.65	1.00		0.62	1.00		0.45	1.00		0.33	1.00	
Satd. Flow (perm)	1215	1774		1147	1811		839	3461		612	3486	
Volume (vph)	50	150	70	90	130	30	70	580	100	20	450	50
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	156	73	94	135	31	73	604	104	21	469	52
RTOR Reduction (vph)	0	42	0	0	19	0	0	35	0	0	21	0
Lane Group Flow (vph)	52	187	0	94	147	0	73	673	0	21	500	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	486	710		459	724		336	1384		245	1394	
v/s Ratio Prot		c0.11			0.08			c0.19			0.14	
v/s Ratio Perm	0.04			0.08			0.09			0.03		
v/c Ratio	0.11	0.26		0.20	0.20		0.22	0.49		0.09	0.36	
Uniform Delay, d1	7.5	8.0		7.8	7.8		7.9	8.9		7.5	8.4	
Progression Factor	1.00	1.00		1.00	1.00		0.85	0.93		0.87	0.97	
Incremental Delay, d2	0.4	0.9		1.0	0.6		1.3	1.1		0.6	0.6	
Delay (s)	8.0	9.0		8.8	8.5		8.0	9.4		7.1	8.8	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		8.8			8.6			9.2			8.7	
Approach LOS		A			A			A			A	

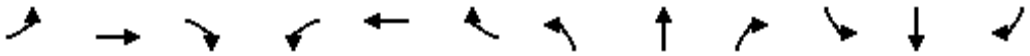
Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



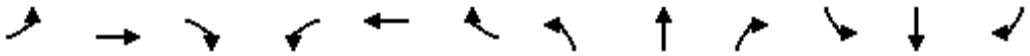
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	3415		1770	1839		1770	1863	1583
Flt Permitted	0.54	1.00	1.00	0.30	1.00		0.43	1.00		0.49	1.00	1.00
Satd. Flow (perm)	1000	1863	1583	554	3415		798	1839		905	1863	1583
Volume (vph)	170	350	110	40	230	70	70	330	30	70	430	130
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	380	120	43	250	76	76	359	33	76	467	141
RTOR Reduction (vph)	0	0	86	0	55	0	0	5	0	0	0	59
Lane Group Flow (vph)	185	380	34	43	271	0	76	387	0	76	467	82
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	16.9	16.9	16.9	16.9	16.9		35.1	35.1		35.1	35.1	35.1
Effective Green, g (s)	16.9	16.9	16.9	16.9	16.9		35.1	35.1		35.1	35.1	35.1
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28		0.59	0.59		0.59	0.59	0.59
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	282	525	446	156	962		467	1076		529	1090	926
v/s Ratio Prot		c0.20			0.08			0.21			c0.25	
v/s Ratio Perm	0.18		0.02	0.08			0.10			0.08		0.05
v/c Ratio	0.66	0.72	0.08	0.28	0.28		0.16	0.36		0.14	0.43	0.09
Uniform Delay, d1	19.0	19.4	15.8	16.8	16.8		5.7	6.5		5.6	6.9	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.4	4.9	0.1	1.0	0.2		0.7	0.9		0.6	1.2	0.2
Delay (s)	24.4	24.4	15.9	17.7	17.0		6.5	7.5		6.2	8.1	5.6
Level of Service	C	C	B	B	B		A	A		A	A	A
Approach Delay (s)		22.9			17.1			7.3			7.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3423			3494						5030	
Flt Permitted		1.00			0.65						1.00	
Satd. Flow (perm)		3423			2317						5030	
Volume (vph)	0	360	100	90	260	0	0	0	0	80	1450	90
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	391	109	98	283	0	0	0	0	87	1576	98
RTOR Reduction (vph)	0	25	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	475	0	0	381	0	0	0	0	0	1753	0
Turn Type	Perm			Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases	4			8						6		
Actuated Green, G (s)		25.6			25.6						53.5	
Effective Green, g (s)		27.6			27.6						54.4	
Actuated g/C Ratio		0.31			0.31						0.60	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1050			711						3040	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.16						0.35	
v/c Ratio		0.45			0.54						0.58	
Uniform Delay, d1		25.1			25.9						10.8	
Progression Factor		1.00			0.32						0.59	
Incremental Delay, d2		0.1			0.3						0.8	
Delay (s)		25.2			8.6						7.1	
Level of Service		C			A						A	
Approach Delay (s)		25.2			8.6			0.0			7.1	
Approach LOS		C			A			A			A	

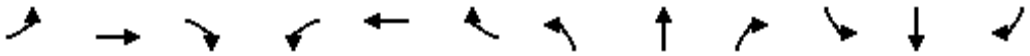
Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	60	330	0	0	260	30	70	140	20	40	0	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	359	0	0	283	33	76	152	22	43	0	76

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	424	315	76	174	120
Volume Left (vph)	65	0	76	0	43
Volume Right (vph)	0	33	0	22	76
Hadj (s)	0.06	-0.03	0.53	-0.05	-0.28
Departure Headway (s)	5.8	5.9	7.4	6.8	6.5
Degree Utilization, x	0.68	0.51	0.16	0.33	0.22
Capacity (veh/h)	601	570	433	470	462
Control Delay (s)	20.0	14.9	10.6	12.0	11.3
Approach Delay (s)	20.0	14.9	11.6		11.3
Approach LOS	C	B	B		B

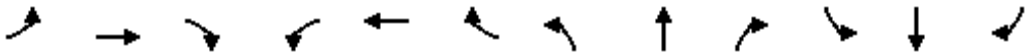
Intersection Summary				
Delay	15.7			
HCM Level of Service	C			
Intersection Capacity Utilization	64.6%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	120	280	40	60	230	20	30	280	30	70	360	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	130	304	43	65	250	22	33	304	33	76	391	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	478	337	370	543
Volume Left (vph)	130	65	33	76
Volume Right (vph)	43	22	33	76
Hadj (s)	0.03	0.03	0.00	-0.02
Departure Headway (s)	9.2	9.5	9.3	9.1
Degree Utilization, x	1.22	0.89	0.95	1.38
Capacity (veh/h)	398	369	384	403
Control Delay (s)	149.1	53.5	65.3	211.7
Approach Delay (s)	149.1	53.5	65.3	211.7
Approach LOS	F	F	F	F

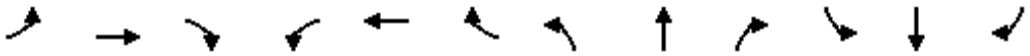
Intersection Summary			
Delay	132.2		
HCM Level of Service	F		
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1820		1770	1863	1583	1770	3495		1770	3494	
Flt Permitted	0.66	1.00		0.62	1.00	1.00	0.38	1.00		0.29	1.00	
Satd. Flow (perm)	1230	1820		1158	1863	1583	701	3495		533	3494	
Volume (vph)	70	170	30	40	140	60	30	660	60	30	530	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	185	33	43	152	65	33	717	65	33	576	54
RTOR Reduction (vph)	0	16	0	0	0	39	0	17	0	0	17	0
Lane Group Flow (vph)	76	202	0	43	152	26	33	765	0	33	613	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	492	728		463	745	633	280	1398		213	1398	
v/s Ratio Prot		c0.11			0.08			c0.22			0.18	
v/s Ratio Perm	0.06			0.04		0.02	0.05			0.06		
v/c Ratio	0.15	0.28		0.09	0.20	0.04	0.12	0.55		0.15	0.44	
Uniform Delay, d1	7.7	8.1		7.5	7.8	7.3	7.6	9.2		7.7	8.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.90	0.97	
Incremental Delay, d2	0.7	0.9		0.4	0.6	0.1	0.9	1.5		1.5	1.0	
Delay (s)	8.3	9.0		7.9	8.5	7.4	8.4	10.8		8.4	9.4	
Level of Service	A	A		A	A	A	A	B		A	A	
Approach Delay (s)		8.9			8.1			10.7			9.3	
Approach LOS		A			A			B			A	

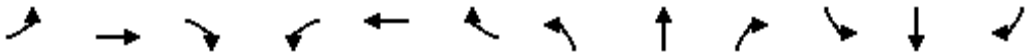
Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.92			1.00						0.96	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3260			3432						4881	
Flt Permitted		1.00			0.70						1.00	
Satd. Flow (perm)		3260			2468						4881	
Volume (vph)	0	90	100	330	200	0	0	0	0	20	140	50
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	94	104	344	208	0	0	0	0	21	146	52
RTOR Reduction (vph)	0	65	0	0	0	0	0	0	0	0	24	0
Lane Group Flow (vph)	0	133	0	0	552	0	0	0	0	0	195	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		31.1			31.1						44.5	
Effective Green, g (s)		31.6			31.6						45.4	
Actuated g/C Ratio		0.37			0.37						0.53	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1212			918						2607	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.22						0.04	
v/c Ratio		0.11			0.60						0.07	
Uniform Delay, d1		17.5			21.6						9.6	
Progression Factor		1.00			0.23						1.00	
Incremental Delay, d2		0.0			0.6						0.1	
Delay (s)		17.5			5.6						9.7	
Level of Service		B			A						A	
Approach Delay (s)		17.5			5.6			0.0			9.7	
Approach LOS		B			A			A			A	

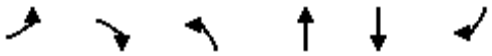
Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	200	0	0	230	10	670	180	110	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	11	213	0	0	245	11	713	191	117	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	223	255	475	546
Volume Left (vph)	11	0	475	238
Volume Right (vph)	0	11	0	117
Hadj (s)	0.04	0.01	0.53	0.10
Departure Headway (s)	6.4	6.3	6.6	6.1
Degree Utilization, x	0.40	0.45	0.87	0.93
Capacity (veh/h)	557	565	544	577
Control Delay (s)	13.6	14.4	37.0	44.8
Approach Delay (s)	13.6	14.4	41.2	
Approach LOS	B	B	E	

Intersection Summary				
Delay		32.5		
HCM Level of Service		D		
Intersection Capacity Utilization		52.0%	ICU Level of Service	A
Analysis Period (min)		15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4835	
Flt Permitted					1.00	
Satd. Flow (perm)					4835	
Volume (vph)	0	0	0	0	1370	670
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	1412	691
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2103	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4835	
v/s Ratio Prot					c0.43	
v/s Ratio Perm						
v/c Ratio					0.43	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.3	
Delay (s)					0.3	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.3	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #	
Volume Total (vph)	
Volume Left (vph)	
Volume Right (vph)	
Hadj (s)	
Departure Headway (s)	
Degree Utilization, x	
Capacity (veh/h)	
Control Delay (s)	
Approach Delay (s)	
Approach LOS	

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

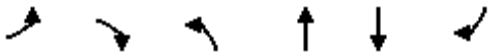
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

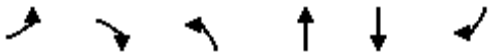
Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	44.8%	ICU Level of Service	A	
Analysis Period (min)	15			



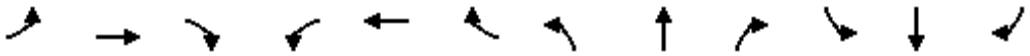
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.97			
Flt Protected			1.00			
Satd. Flow (prot)			4921			
Flt Permitted			1.00			
Satd. Flow (perm)			4921			
Volume (vph)	0	0	1530	420	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1577	433	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2010	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4921			
v/s Ratio Prot			c0.41			
v/s Ratio Perm						
v/c Ratio			0.41			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.3			
Delay (s)			0.3			
Level of Service			A			
Approach Delay (s)	0.0		0.3		0.0	
Approach LOS	A		A		A	

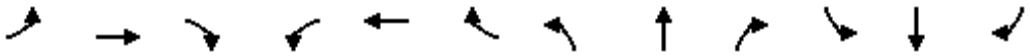
Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



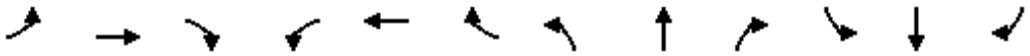
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3460		3433	3539	1583	1770	5041	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3460		3433	3539	1583	1770	5041	
Volume (vph)	220	870	200	290	680	120	410	800	260	160	640	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	946	217	315	739	130	446	870	283	174	696	43
RTOR Reduction (vph)	0	0	89	0	11	0	0	0	182	0	6	0
Lane Group Flow (vph)	239	946	128	315	858	0	446	870	101	174	733	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	12.0	34.0	34.0	14.5	36.5		12.5	29.5	29.5	12.5	29.5	
Effective Green, g (s)	13.0	35.0	35.0	15.5	37.5		12.5	31.0	31.0	12.5	31.0	
Actuated g/C Ratio	0.12	0.32	0.32	0.14	0.34		0.11	0.28	0.28	0.11	0.28	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	406	1126	504	484	1180		390	997	446	201	1421	
v/s Ratio Prot	0.07	c0.27		c0.09	0.25		c0.13	c0.25		c0.10	0.15	
v/s Ratio Perm			0.08						0.06			
v/c Ratio	0.59	0.84	0.25	0.65	0.73		1.14	0.87	0.23	0.87	0.52	
Uniform Delay, d1	46.0	34.9	27.8	44.7	31.8		48.8	37.6	30.3	47.9	33.2	
Progression Factor	0.76	1.35	2.14	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	3.8	0.1	2.8	2.1		90.8	10.5	1.2	29.7	1.3	
Delay (s)	36.3	50.8	59.7	47.5	33.9		139.5	48.1	31.5	77.6	34.5	
Level of Service	D	D	E	D	C		F	D	C	E	C	
Approach Delay (s)		49.7			37.5			70.7			42.7	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM Average Control Delay	52.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



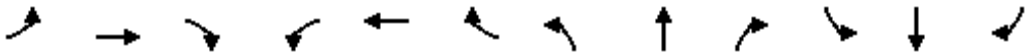
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.97			0.98				
Flt Protected		1.00			1.00			1.00				
Satd. Flow (prot)		3526			3439			4999				
Flt Permitted		0.85			1.00			1.00				
Satd. Flow (perm)		3019			3439			4999				
Volume (vph)	30	380	0	0	430	100	50	1430	170	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	413	0	0	467	109	54	1554	185	0	0	0
RTOR Reduction (vph)	0	0	0	0	23	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	446	0	0	553	0	0	1779	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		24.7			24.7			55.9				
Effective Green, g (s)		25.2			25.2			56.8				
Actuated g/C Ratio		0.28			0.28			0.63				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		845			963			3155				
v/s Ratio Prot					c0.16							
v/s Ratio Perm		0.15						0.36				
v/c Ratio		0.53			0.57			0.56				
Uniform Delay, d1		27.4			27.8			9.5				
Progression Factor		0.33			1.00			1.35				
Incremental Delay, d2		0.2			0.5			0.7				
Delay (s)		9.3			28.3			13.5				
Level of Service		A			C			B				
Approach Delay (s)		9.3			28.3			13.5			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



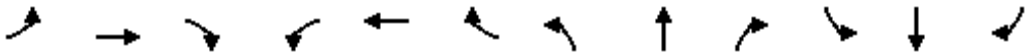
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3469			3469			5037				
Flt Permitted		0.66			1.00			1.00				
Satd. Flow (perm)		2350			3469			5037				
Volume (vph)	130	190	0	0	260	40	80	1380	70	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	134	196	0	0	268	41	82	1423	72	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	330	0	0	294	0	0	1572	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		16.2			16.2			63.9				
Effective Green, g (s)		17.2			17.2			64.8				
Actuated g/C Ratio		0.19			0.19			0.72				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		449			663			3627				
v/s Ratio Prot					0.08							
v/s Ratio Perm		c0.14						0.31				
v/c Ratio		0.73			0.44			0.43				
Uniform Delay, d1		34.3			32.2			5.1				
Progression Factor		0.24			1.00			0.49				
Incremental Delay, d2		4.8			0.2			0.3				
Delay (s)		13.1			32.3			2.8				
Level of Service		B			C			A				
Approach Delay (s)		13.1			32.3			2.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0		4.0				
Lane Util. Factor		0.95			1.00	1.00		0.91				
Frt		1.00			1.00	0.85		0.99				
Flt Protected		0.99			1.00	1.00		1.00				
Satd. Flow (prot)		3500			1863	1583		5048				
Flt Permitted		0.64			1.00	1.00		1.00				
Satd. Flow (perm)		2261			1863	1583		5048				
Volume (vph)	80	280	0	0	350	90	70	1580	60	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	304	0	0	380	98	76	1717	65	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	18	0	4	0	0	0	0
Lane Group Flow (vph)	0	391	0	0	380	80	0	1854	0	0	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8		8	2					
Actuated Green, G (s)		25.6			25.6	25.6		53.5				
Effective Green, g (s)		27.6			27.6	27.6		54.4				
Actuated g/C Ratio		0.31			0.31	0.31		0.60				
Clearance Time (s)		6.0			6.0	6.0		4.9				
Vehicle Extension (s)		2.0			2.0	2.0		2.0				
Lane Grp Cap (vph)		693			571	485		3051				
v/s Ratio Prot					c0.20							
v/s Ratio Perm		0.17				0.05		0.37				
v/c Ratio		0.56			0.67	0.16		0.61				
Uniform Delay, d1		26.2			27.2	22.8		11.1				
Progression Factor		0.40			1.00	1.00		1.00				
Incremental Delay, d2		0.6			2.3	0.1		0.9				
Delay (s)		11.0			29.5	22.8		12.0				
Level of Service		B			C	C		B				
Approach Delay (s)		11.0			28.1			12.0			0.0	
Approach LOS		B			C			B			A	

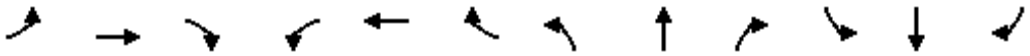
Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

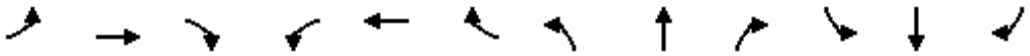
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



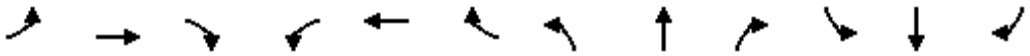
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3500			3339			5010				
Flt Permitted		0.80			1.00			1.00				
Satd. Flow (perm)		2819			3339			5010				
Volume (vph)	20	70	0	0	530	320	40	1270	130	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	73	0	0	552	333	42	1323	135	0	0	0
RTOR Reduction (vph)	0	0	0	0	25	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	94	0	0	860	0	0	1486	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		31.1			31.1			44.5				
Effective Green, g (s)		31.6			31.6			45.4				
Actuated g/C Ratio		0.37			0.37			0.53				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		1048			1241			2676				
v/s Ratio Prot					c0.26							
v/s Ratio Perm		0.03						0.30				
v/c Ratio		0.09			0.69			0.56				
Uniform Delay, d1		17.4			22.6			13.1				
Progression Factor		0.78			1.00			1.00				
Incremental Delay, d2		0.0			1.4			0.8				
Delay (s)		13.6			24.0			14.0				
Level of Service		B			C			B				
Approach Delay (s)		13.6			24.0			14.0			0.0	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	17.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	780	0	540	0	0	0	0	1170	310	470	890	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	804	0	557	0	0	0	0	1206	320	485	918	0
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	804	0	419	0	0	0	0	1206	92	485	918	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	19.0		19.0					24.0	24.0	28.0	56.5	
Effective Green, g (s)	20.0		20.0					24.5	24.5	28.5	57.0	
Actuated g/C Ratio	0.24		0.24					0.29	0.29	0.34	0.67	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	2.0	4.0	
Lane Grp Cap (vph)	808		372					1466	456	593	3410	
v/s Ratio Prot								c0.24		c0.27	0.18	
v/s Ratio Perm	0.23		c0.26						0.06			
v/c Ratio	1.00		1.13					0.82	0.20	0.82	0.27	
Uniform Delay, d1	32.5		32.5					28.2	22.9	25.9	5.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	30.2		85.1					5.3	1.0	8.2	0.2	
Delay (s)	62.7		117.6					33.6	23.9	34.0	5.8	
Level of Service	E		F					C	C	C	A	
Approach Delay (s)		85.2			0.0			31.5			15.6	
Approach LOS		F			A			C			B	

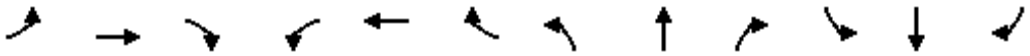
Intersection Summary			
HCM Average Control Delay	43.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

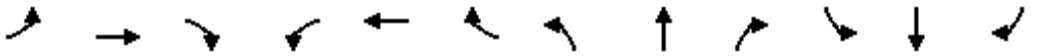
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



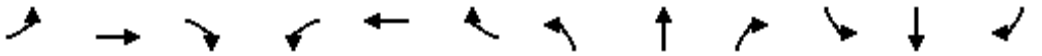
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3453		1770	3492		1770	3349		1770	3445	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3453		1770	3492		1770	3349		1770	3445	
Volume (vph)	40	620	120	120	810	80	140	270	150	120	420	90
Peak-hour factor, PHF	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	54	838	162	162	1095	108	189	365	203	162	568	122
RTOR Reduction (vph)	0	16	0	0	6	0	0	76	0	0	18	0
Lane Group Flow (vph)	54	984	0	162	1197	0	189	492	0	162	672	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	6.5	33.3		13.5	40.3		9.3	27.0		9.3	27.0	
Effective Green, g (s)	6.5	34.6		13.5	41.6		8.3	27.6		8.3	27.6	
Actuated g/C Ratio	0.06	0.35		0.14	0.42		0.08	0.28		0.08	0.28	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	115	1195		239	1453		147	924		147	951	
v/s Ratio Prot	0.03	c0.28		0.09	c0.34		c0.11	0.15		0.09	c0.20	
v/s Ratio Perm												
v/c Ratio	0.47	0.82		0.68	0.82		1.29	0.53		1.10	0.71	
Uniform Delay, d1	45.1	29.9		41.2	25.9		45.9	30.7		45.9	32.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	6.5		5.9	5.4		170.2	2.2		104.2	4.4	
Delay (s)	46.2	36.4		47.1	31.4		216.0	32.9		150.0	37.0	
Level of Service	D	D		D	C		F	C		F	D	
Approach Delay (s)		36.9			33.2			78.6			58.5	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	48.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3491		1770	3492		1770	3439		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3491		1770	3492		1770	3439		1770	1863	1583
Volume (vph)	120	600	60	80	820	80	80	260	60	210	380	290
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	141	706	71	94	965	94	94	306	71	247	447	341
RTOR Reduction (vph)	0	7	0	0	7	0	0	21	0	0	0	138
Lane Group Flow (vph)	141	770	0	94	1052	0	94	356	0	247	447	203
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	10.5	38.3		8.6	36.4		8.4	23.6		11.3	26.5	26.5
Effective Green, g (s)	10.5	39.6		8.6	37.7		8.4	24.5		11.3	27.4	27.4
Actuated g/C Ratio	0.10	0.40		0.09	0.38		0.08	0.24		0.11	0.27	0.27
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	4.9
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.0
Lane Grp Cap (vph)	186	1382		152	1316		149	843		200	510	434
v/s Ratio Prot	c0.08	0.22		0.05	c0.30		0.05	0.10		c0.14	c0.24	
v/s Ratio Perm												0.13
v/c Ratio	0.76	0.56		0.62	0.80		0.63	0.42		1.24	0.88	0.47
Uniform Delay, d1	43.5	23.4		44.1	27.8		44.3	31.8		44.4	34.7	30.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	16.1	1.6		7.3	5.2		8.4	0.1		141.2	15.1	0.3
Delay (s)	59.6	25.0		51.4	32.9		52.7	31.9		185.5	49.8	30.5
Level of Service	E	C		D	C		D	C		F	D	C
Approach Delay (s)		30.3			34.4			36.1			75.8	
Approach LOS		C			C			D			E	

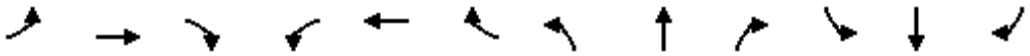
Intersection Summary			
HCM Average Control Delay	45.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3508		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.41	1.00		0.69	1.00	1.00	0.70	1.00	1.00
Satd. Flow (perm)	466	3539	1583	754	3508		1280	1863	1583	1313	3539	1583
Volume (vph)	10	510	160	120	790	50	170	70	80	80	90	10
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	11	586	184	138	908	57	195	80	92	92	103	11
RTOR Reduction (vph)	0	0	110	0	11	0	0	0	55	0	0	7
Lane Group Flow (vph)	11	586	74	138	954	0	195	80	37	92	103	4
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	302	1403		512	745	633	525	1416	633
v/s Ratio Prot		0.17			c0.27			0.04			0.03	
v/s Ratio Perm	0.02		0.05	0.18			c0.15		0.02	0.07		0.00
v/c Ratio	0.06	0.41	0.12	0.46	0.68		0.38	0.11	0.06	0.18	0.07	0.01
Uniform Delay, d1	7.4	8.6	7.6	8.8	9.9		8.5	7.5	7.4	7.7	7.4	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		2.04	2.06	3.88	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.9	0.4	4.9	2.7		1.9	0.3	0.2	0.7	0.1	0.0
Delay (s)	8.0	9.5	7.9	13.7	12.6		19.2	15.7	28.7	8.5	7.5	7.2
Level of Service	A	A	A	B	B		B	B	C	A	A	A
Approach Delay (s)		9.1			12.7			20.8			7.9	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

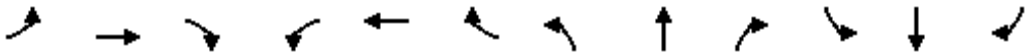


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3470		1770	1863	1583	1770	3419	
Flt Permitted	0.25	1.00	1.00	0.35	1.00		0.33	1.00	1.00	0.36	1.00	
Satd. Flow (perm)	464	1863	1583	646	3470		622	1863	1583	662	3419	
Volume (vph)	70	240	60	90	400	60	70	400	80	60	410	120
Peak-hour factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Adj. Flow (vph)	100	343	86	129	571	86	100	571	114	86	586	171
RTOR Reduction (vph)	0	0	53	0	23	0	0	0	47	0	36	0
Lane Group Flow (vph)	100	343	33	129	634	0	100	571	67	86	721	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	16.6	16.6	16.6	16.6	16.6		35.4	35.4	35.4	35.4	35.4	
Effective Green, g (s)	16.6	16.6	16.6	16.6	16.6		35.4	35.4	35.4	35.4	35.4	
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28		0.59	0.59	0.59	0.59	0.59	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	128	515	438	179	960		367	1099	934	391	2017	
v/s Ratio Prot		0.18			0.18			c0.31			0.21	
v/s Ratio Perm	c0.22		0.02	0.20			0.16		0.04	0.13		
v/c Ratio	0.78	0.67	0.08	0.72	0.66		0.27	0.52	0.07	0.22	0.36	
Uniform Delay, d1	20.0	19.2	16.0	19.6	19.2		6.0	7.3	5.3	5.8	6.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	25.9	3.2	0.1	13.3	1.7		1.8	1.8	0.1	1.3	0.5	
Delay (s)	45.9	22.5	16.1	32.9	20.9		7.8	9.0	5.4	7.1	6.9	
Level of Service	D	C	B	C	C		A	A	A	A	A	
Approach Delay (s)		25.9			22.9			8.4			6.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3433			3490						5046	
Flt Permitted		1.00			0.66						1.00	
Satd. Flow (perm)		3433			2329						5046	
Volume (vph)	0	320	80	140	360	0	0	0	0	40	1500	70
Peak-hour factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	356	89	152	391	0	0	0	0	43	1630	76
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	424	0	0	543	0	0	0	0	0	1743	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		27.9			27.9						52.7	
Effective Green, g (s)		28.4			28.4						53.6	
Actuated g/C Ratio		0.32			0.32						0.60	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1083			735						3005	
v/s Ratio Prot		0.12										
v/s Ratio Perm					c0.23						0.35	
v/c Ratio		0.39			0.74						0.58	
Uniform Delay, d1		24.1			27.5						11.2	
Progression Factor		1.00			0.35						1.00	
Incremental Delay, d2		0.1			3.0						0.8	
Delay (s)		24.1			12.5						12.1	
Level of Service		C			B						B	
Approach Delay (s)		24.1			12.5			0.0			12.1	
Approach LOS		C			B			A			B	

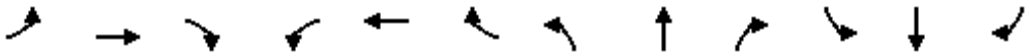
Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1857		1770	1793		1770	1828	
Flt Permitted	0.25	1.00	1.00	0.33	1.00		0.69	1.00		0.69	1.00	
Satd. Flow (perm)	466	1863	1583	614	1857		1294	1793		1294	1828	
Volume (vph)	30	410	10	60	520	10	10	60	20	20	70	10
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	36	494	12	72	627	12	12	72	24	24	84	12
RTOR Reduction (vph)	0	0	7	0	2	0	0	14	0	0	7	0
Lane Group Flow (vph)	36	494	5	72	637	0	12	82	0	24	89	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	186	745	633	246	743		518	717		518	731	
v/s Ratio Prot		0.27			c0.34			0.05			c0.05	
v/s Ratio Perm	0.08		0.00	0.12			0.01			0.02		
v/c Ratio	0.19	0.66	0.01	0.29	0.86		0.02	0.11		0.05	0.12	
Uniform Delay, d1	7.8	9.8	7.2	8.2	11.0		7.3	7.5		7.3	7.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.3	4.6	0.0	3.0	12.2		0.1	0.3		0.2	0.3	
Delay (s)	10.1	14.4	7.2	11.2	23.2		7.3	7.9		7.5	7.9	
Level of Service	B	B	A	B	C		A	A		A	A	
Approach Delay (s)		14.0			22.0			7.8			7.8	
Approach LOS		B			C			A			A	

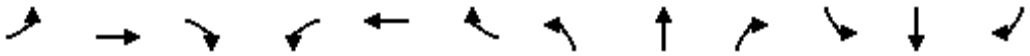
Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1814		1770	1832		1770	1820		1770	1826	
Flt Permitted	0.23	1.00		0.26	1.00		0.58	1.00		0.55	1.00	
Satd. Flow (perm)	436	1814		483	1832		1080	1820		1023	1826	
Volume (vph)	30	280	60	30	320	40	60	220	40	50	200	30
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	36	337	72	36	386	48	72	265	48	60	241	36
RTOR Reduction (vph)	0	13	0	0	8	0	0	10	0	0	9	0
Lane Group Flow (vph)	36	396	0	36	426	0	72	303	0	60	268	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.1	17.1		16.1	16.1		34.9	34.9		34.4	34.4	
Effective Green, g (s)	17.1	17.1		17.1	17.1		34.9	34.9		34.9	34.9	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.58		0.58	0.58	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	124	517		138	522		628	1059		595	1062	
v/s Ratio Prot		0.22			c0.23			c0.17			0.15	
v/s Ratio Perm	0.08			0.07			0.07			0.06		
v/c Ratio	0.29	0.77		0.26	0.82		0.11	0.29		0.10	0.25	
Uniform Delay, d1	16.7	19.6		16.6	20.0		5.6	6.3		5.6	6.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	6.7		1.0	9.6		0.4	0.7		0.3	0.6	
Delay (s)	18.0	26.3		17.6	29.5		6.0	7.0		5.9	6.7	
Level of Service	B	C		B	C		A	A		A	A	
Approach Delay (s)		25.6			28.6			6.8			6.6	
Approach LOS		C			C			A			A	

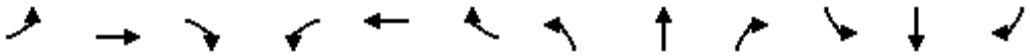
Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1810		1770	1797		1770	1863	1583	1770	1842	
Flt Permitted	0.47	1.00		0.62	1.00		0.38	1.00	1.00	0.46	1.00	
Satd. Flow (perm)	869	1810		1148	1797		711	1863	1583	848	1842	
Volume (vph)	10	170	40	130	260	80	60	350	120	80	380	30
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	185	43	141	283	87	65	380	130	87	413	33
RTOR Reduction (vph)	0	21	0	0	28	0	0	0	78	0	7	0
Lane Group Flow (vph)	11	207	0	141	342	0	65	380	52	87	439	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	348	724		459	719		284	745	633	339	737	
v/s Ratio Prot		0.11			c0.19			0.20			c0.24	
v/s Ratio Perm	0.01			0.12			0.09		0.03	0.10		
v/c Ratio	0.03	0.29		0.31	0.48		0.23	0.51	0.08	0.26	0.60	
Uniform Delay, d1	7.3	8.1		8.2	8.9		7.9	9.0	7.4	8.0	9.5	
Progression Factor	1.00	1.00		1.00	1.00		1.26	1.31	2.92	1.00	1.07	
Incremental Delay, d2	0.2	1.0		1.7	2.3		1.8	2.4	0.2	1.8	3.5	
Delay (s)	7.5	9.1		9.9	11.1		11.8	14.3	22.0	9.8	13.5	
Level of Service	A	A		A	B		B	B	C	A	B	
Approach Delay (s)		9.0			10.8			15.7			12.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

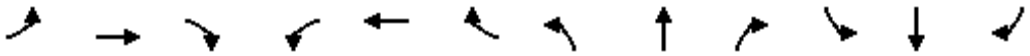
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1816		1770	1783		1770	3465		1770	3437	
Flt Permitted	0.45	1.00		0.63	1.00		0.42	1.00		0.48	1.00	
Satd. Flow (perm)	846	1816		1182	1783		780	3465		901	3437	
Volume (vph)	60	150	30	70	250	100	80	370	60	80	420	100
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	163	33	76	272	109	87	402	65	87	457	109
RTOR Reduction (vph)	0	18	0	0	36	0	0	32	0	0	52	0
Lane Group Flow (vph)	65	178	0	76	345	0	87	435	0	87	514	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	338	726		473	713		312	1386		360	1375	
v/s Ratio Prot		0.10			c0.19			0.13			c0.15	
v/s Ratio Perm	0.08			0.06			0.11			0.10		
v/c Ratio	0.19	0.25		0.16	0.48		0.28	0.31		0.24	0.37	
Uniform Delay, d1	7.8	8.0		7.7	8.9		8.1	8.2		8.0	8.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	0.8		0.7	2.3		2.2	0.6		1.6	0.8	
Delay (s)	9.1	8.8		8.4	11.3		10.3	8.8		9.6	9.2	
Level of Service	A	A		A	B		B	A		A	A	
Approach Delay (s)		8.9			10.8			9.1			9.3	
Approach LOS		A			B			A			A	

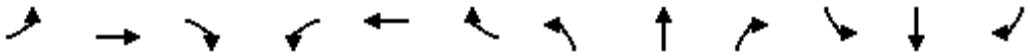
Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



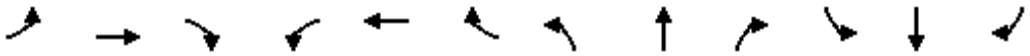
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3413			3503						5023	
Flt Permitted		1.00			0.70						1.00	
Satd. Flow (perm)		3413			2485						5023	
Volume (vph)	0	290	90	60	230	0	0	0	0	30	1340	110
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	315	98	65	250	0	0	0	0	33	1457	120
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	378	0	0	315	0	0	0	0	0	1601	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		18.2			18.2						61.9	
Effective Green, g (s)		19.2			19.2						62.8	
Actuated g/C Ratio		0.21			0.21						0.70	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		728			530						3505	
v/s Ratio Prot		0.11										
v/s Ratio Perm					c0.13						0.32	
v/c Ratio		0.52			0.59						0.46	
Uniform Delay, d1		31.3			31.9						6.0	
Progression Factor		1.00			0.38						1.72	
Incremental Delay, d2		0.3			1.1						0.4	
Delay (s)		31.6			13.4						10.7	
Level of Service		C			B						B	
Approach Delay (s)		31.6			13.4			0.0			10.7	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

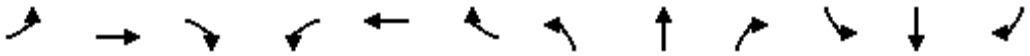
Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1751		1770	1810		1770	3485		1770	3519	
Flt Permitted	0.65	1.00		0.62	1.00		0.42	1.00		0.44	1.00	
Satd. Flow (perm)	1204	1751		1156	1810		773	3485		815	3519	
Volume (vph)	50	120	80	80	130	30	70	440	50	10	500	20
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	55	132	88	88	143	33	77	484	55	11	549	22
RTOR Reduction (vph)	0	53	0	0	20	0	0	22	0	0	7	0
Lane Group Flow (vph)	55	167	0	88	156	0	77	517	0	11	564	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	482	700		462	724		309	1394		326	1408	
v/s Ratio Prot		c0.10			0.09			0.15			c0.16	
v/s Ratio Perm	0.05			0.08			0.10			0.01		
v/c Ratio	0.11	0.24		0.19	0.22		0.25	0.37		0.03	0.40	
Uniform Delay, d1	7.5	8.0		7.8	7.9		8.0	8.5		7.3	8.6	
Progression Factor	1.00	1.00		1.00	1.00		0.91	0.93		0.84	0.97	
Incremental Delay, d2	0.5	0.8		0.9	0.7		1.8	0.7		0.2	0.7	
Delay (s)	8.0	8.8		8.7	8.6		9.1	8.6		6.3	9.1	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		8.6			8.6			8.7			9.0	
Approach LOS		A			A			A			A	

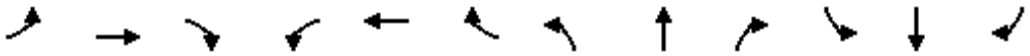
Intersection Summary					
HCM Average Control Delay	8.8	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.32				
Actuated Cycle Length (s)	40.0	Sum of lost time (s)		8.0	
Intersection Capacity Utilization	47.3%	ICU Level of Service		A	
Analysis Period (min)	15				

c Critical Lane Group



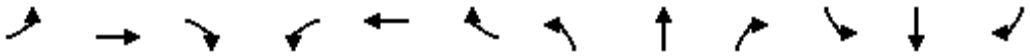
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3459		1770	1830		1770	1767	
Flt Permitted	0.46	1.00	1.00	0.61	1.00		0.46	1.00		0.51	1.00	
Satd. Flow (perm)	855	1863	1583	1127	3459		854	1830		956	1767	
Volume (vph)	100	150	50	50	280	50	60	300	40	60	270	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	112	169	56	56	315	56	67	337	45	67	303	157
RTOR Reduction (vph)	0	0	44	0	31	0	0	6	0	0	21	0
Lane Group Flow (vph)	112	169	12	56	340	0	67	376	0	67	439	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	12.8	12.8	12.8	12.8	12.8		39.2	39.2		39.2	39.2	
Effective Green, g (s)	12.8	12.8	12.8	12.8	12.8		39.2	39.2		39.2	39.2	
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21		0.65	0.65		0.65	0.65	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	182	397	338	240	738		558	1196		625	1154	
v/s Ratio Prot		0.09			0.10			0.21			c0.25	
v/s Ratio Perm	c0.13		0.01	0.05			0.08			0.07		
v/c Ratio	0.62	0.43	0.04	0.23	0.46		0.12	0.31		0.11	0.38	
Uniform Delay, d1	21.4	20.4	18.7	19.5	20.6		3.9	4.5		3.9	4.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.1	0.7	0.0	0.5	0.5		0.4	0.7		0.3	1.0	
Delay (s)	27.4	21.2	18.7	20.0	21.0		4.4	5.2		4.2	5.8	
Level of Service	C	C	B	C	C		A	A		A	A	
Approach Delay (s)		22.8			20.9			5.1			5.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3394			3487						5035	
Flt Permitted		1.00			0.67						1.00	
Satd. Flow (perm)		3394			2383						5035	
Volume (vph)	0	240	90	110	260	0	0	0	0	40	1590	100
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	261	98	120	283	0	0	0	0	43	1728	109
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	337	0	0	403	0	0	0	0	0	1873	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		18.4			18.4						60.7	
Effective Green, g (s)		20.4			20.4						61.6	
Actuated g/C Ratio		0.23			0.23						0.68	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		769			540						3446	
v/s Ratio Prot		0.10										
v/s Ratio Perm					c0.17						0.37	
v/c Ratio		0.44			0.75						0.54	
Uniform Delay, d1		29.9			32.4						7.1	
Progression Factor		1.00			0.32						0.36	
Incremental Delay, d2		0.1			4.2						0.6	
Delay (s)		30.0			14.7						3.1	
Level of Service		C			B						A	
Approach Delay (s)		30.0			14.7			0.0			3.1	
Approach LOS		C			B			A			A	

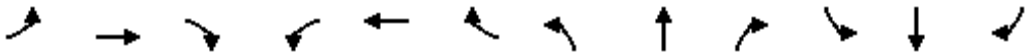
Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	60	200	0	0	290	30	110	110	10	20	0	50
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	75	250	0	0	362	38	138	138	12	25	0	62

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	325	400	138	150	88
Volume Left (vph)	75	0	138	0	25
Volume Right (vph)	0	38	0	13	63
Hadj (s)	0.08	-0.02	0.53	-0.02	-0.34
Departure Headway (s)	5.9	5.7	7.3	6.7	6.5
Degree Utilization, x	0.53	0.63	0.28	0.28	0.16
Capacity (veh/h)	579	612	450	493	459
Control Delay (s)	15.3	17.8	11.9	11.1	10.7
Approach Delay (s)	15.3	17.8	11.5		10.7
Approach LOS	C	C	B		B

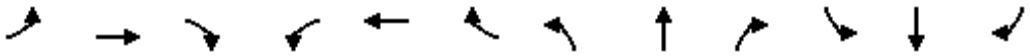
Intersection Summary				
Delay	14.9			
HCM Level of Service	B			
Intersection Capacity Utilization	53.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	60	150	20	20	230	70	40	250	30	70	220	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	163	22	22	250	76	43	272	33	76	239	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	250	348	348	391
Volume Left (vph)	65	22	43	76
Volume Right (vph)	22	76	33	76
Hadj (s)	0.03	-0.08	0.00	-0.04
Departure Headway (s)	8.0	7.5	7.5	7.3
Degree Utilization, x	0.55	0.72	0.73	0.80
Capacity (veh/h)	390	448	447	468
Control Delay (s)	20.4	27.8	27.9	33.3
Approach Delay (s)	20.4	27.8	27.9	33.3
Approach LOS	C	D	D	D

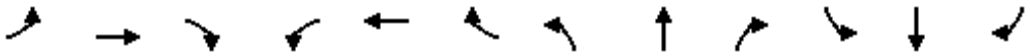
Intersection Summary			
Delay	28.1		
HCM Level of Service	D		
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1831		1770	1863	1583	1770	3480		1770	3494	
Flt Permitted	0.63	1.00		0.63	1.00	1.00	0.30	1.00		0.40	1.00	
Satd. Flow (perm)	1170	1831		1182	1863	1583	555	3480		753	3494	
Volume (vph)	50	160	20	50	190	50	30	480	60	20	640	60
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	174	22	54	207	54	33	522	65	22	696	65
RTOR Reduction (vph)	0	11	0	0	0	32	0	24	0	0	17	0
Lane Group Flow (vph)	54	185	0	54	207	22	33	563	0	22	744	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	468	732		473	745	633	222	1392		301	1398	
v/s Ratio Prot		0.10			c0.11			0.16			c0.21	
v/s Ratio Perm	0.05			0.05		0.01	0.06			0.03		
v/c Ratio	0.12	0.25		0.11	0.28	0.03	0.15	0.40		0.07	0.53	
Uniform Delay, d1	7.5	8.0		7.5	8.1	7.3	7.7	8.6		7.4	9.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.83	0.96	
Incremental Delay, d2	0.5	0.8		0.5	0.9	0.1	1.4	0.9		0.5	1.4	
Delay (s)	8.0	8.8		8.0	9.0	7.4	9.1	9.5		6.6	10.2	
Level of Service	A	A		A	A	A	A	A		A	B	
Approach Delay (s)		8.7			8.6			9.4			10.1	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

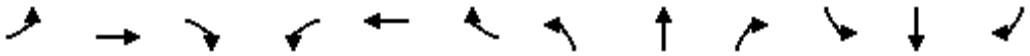


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.90			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3194			3435						5064	
Flt Permitted		1.00			0.69						1.00	
Satd. Flow (perm)		3194			2459						5064	
Volume (vph)	0	70	130	370	240	0	0	0	0	30	1680	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	76	141	402	261	0	0	0	0	33	1826	43
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	209	0	0	663	0	0	0	0	0	1899	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		28.1			28.1						42.5	
Effective Green, g (s)		28.6			28.6						43.4	
Actuated g/C Ratio		0.36			0.36						0.54	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1142			879						2747	
v/s Ratio Prot		0.07										
v/s Ratio Perm					c0.27						0.37	
v/c Ratio		0.18			0.98dl						0.69	
Uniform Delay, d1		17.7			22.6						13.4	
Progression Factor		1.00			0.27						1.00	
Incremental Delay, d2		0.0			2.3						1.5	
Delay (s)		17.7			8.5						14.8	
Level of Service		B			A						B	
Approach Delay (s)		17.7			8.5			0.0			14.8	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

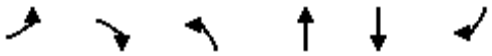
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	140	0	0	250	10	610	150	90	0	0	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	12	171	0	0	305	12	744	183	110	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	183	317	496	541
Volume Left (vph)	12	0	496	248
Volume Right (vph)	0	12	0	110
Hadj (s)	0.05	0.01	0.53	0.12
Departure Headway (s)	6.6	6.2	6.6	6.2
Degree Utilization, x	0.33	0.55	0.91	0.93
Capacity (veh/h)	543	571	532	570
Control Delay (s)	12.8	16.6	44.5	46.0
Approach Delay (s)	12.8	16.6	45.3	
Approach LOS	B	C	E	

Intersection Summary			
Delay	35.5		
HCM Level of Service	E		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4843	
Flt Permitted					1.00	
Satd. Flow (perm)					4843	
Volume (vph)	0	0	0	0	1480	690
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1609	750
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2359	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4843	
v/s Ratio Prot					c0.49	
v/s Ratio Perm						
v/c Ratio					0.49	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.4	
Delay (s)					0.4	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.4	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.96			
Flt Protected			1.00			
Satd. Flow (prot)			4882			
Flt Permitted			1.00			
Satd. Flow (perm)			4882			
Volume (vph)	0	0	1100	400	0	0
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	1209	440	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1649	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4882			
v/s Ratio Prot			c0.34			
v/s Ratio Perm						
v/c Ratio			0.34			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.2			
Delay (s)			0.2			
Level of Service			A			
Approach Delay (s)	0.0		0.2		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

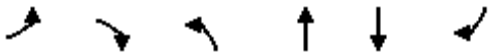
Direction, Lane #	
Volume Total (vph)	
Volume Left (vph)	
Volume Right (vph)	
Hadj (s)	
Departure Headway (s)	
Degree Utilization, x	
Capacity (veh/h)	
Control Delay (s)	
Approach Delay (s)	
Approach LOS	

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service	A	
Analysis Period (min)	15			



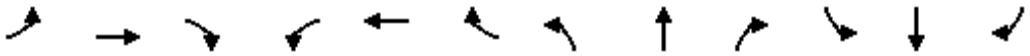
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	47.4%	ICU Level of Service	A	
Analysis Period (min)	15			

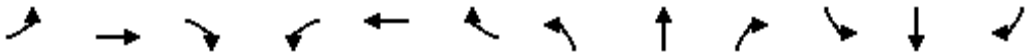
Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		



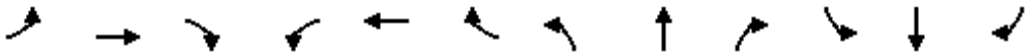
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3513		3433	3539	1583	1770	5005	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3513		3433	3539	1583	1770	5005	
Volume (vph)	210	480	140	340	770	40	210	520	150	150	1190	140
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	522	152	370	837	43	228	565	163	163	1293	152
RTOR Reduction (vph)	0	0	112	0	4	0	0	0	108	0	12	0
Lane Group Flow (vph)	228	522	40	370	876	0	228	565	55	163	1433	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	11.6	28.3	28.3	13.3	30.0		11.6	35.4	35.4	13.5	37.3	
Effective Green, g (s)	12.6	29.3	29.3	14.3	31.0		11.6	36.9	36.9	13.5	38.8	
Actuated g/C Ratio	0.11	0.27	0.27	0.13	0.28		0.11	0.34	0.34	0.12	0.35	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	393	943	422	446	990		362	1187	531	217	1765	
v/s Ratio Prot	0.07	0.15		c0.11	c0.25		c0.07	0.16		0.09	c0.29	
v/s Ratio Perm			0.03						0.03			
v/c Ratio	0.58	0.55	0.10	0.83	0.89		0.63	0.48	0.10	0.75	0.81	
Uniform Delay, d1	46.2	34.7	30.4	46.7	37.8		47.1	28.9	25.2	46.6	32.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	0.6	0.1	11.8	9.5		3.0	1.4	0.4	13.0	4.2	
Delay (s)	48.0	35.3	30.5	58.5	47.3		50.1	30.3	25.5	59.6	36.5	
Level of Service	D	D	C	E	D		D	C	C	E	D	
Approach Delay (s)		37.7			50.6			34.2			38.8	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	40.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



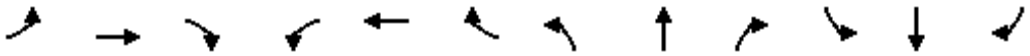
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			0.98				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3517			3500			4969				
Flt Permitted		0.81			1.00			1.00				
Satd. Flow (perm)		2870			3500			4969				
Volume (vph)	40	280	0	0	500	40	80	920	150	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	304	0	0	543	43	87	1000	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	347	0	0	580	0	0	1227	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		27.9			27.9			52.7				
Effective Green, g (s)		28.4			28.4			53.6				
Actuated g/C Ratio		0.32			0.32			0.60				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		906			1104			2959				
v/s Ratio Prot					c0.17							
v/s Ratio Perm		0.12						0.25				
v/c Ratio		0.38			0.53			0.41				
Uniform Delay, d1		24.0			25.3			9.8				
Progression Factor		0.32			1.00			1.02				
Incremental Delay, d2		0.1			0.2			0.4				
Delay (s)		7.8			25.5			10.4				
Level of Service		A			C			B				
Approach Delay (s)		7.8			25.5			10.4			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



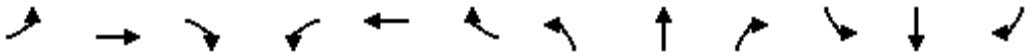
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3479			3489			5050				
Flt Permitted		0.66			1.00			1.00				
Satd. Flow (perm)		2340			3489			5050				
Volume (vph)	100	190	0	0	290	30	80	920	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	207	0	0	315	33	87	1000	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	316	0	0	339	0	0	1107	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		18.2			18.2			61.9				
Effective Green, g (s)		19.2			19.2			62.8				
Actuated g/C Ratio		0.21			0.21			0.70				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		499			744			3524				
v/s Ratio Prot					0.10							
v/s Ratio Perm		c0.14						0.22				
v/c Ratio		0.63			0.46			0.31				
Uniform Delay, d1		32.2			30.8			5.3				
Progression Factor		0.31			1.00			0.73				
Incremental Delay, d2		1.7			0.2			0.2				
Delay (s)		11.6			31.0			4.1				
Level of Service		B			C			A				
Approach Delay (s)		11.6			31.0			4.1			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



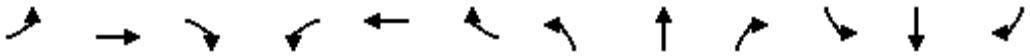
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.96			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3474			3409			5027				
Flt Permitted		0.56			1.00			1.00				
Satd. Flow (perm)		1997			3409			5027				
Volume (vph)	90	150	0	0	370	120	60	1050	70	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	163	0	0	402	130	65	1141	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	36	0	0	7	0	0	0	0
Lane Group Flow (vph)	0	261	0	0	496	0	0	1275	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		18.4			18.4			60.7				
Effective Green, g (s)		20.4			20.4			61.6				
Actuated g/C Ratio		0.23			0.23			0.68				
Clearance Time (s)		6.0			6.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		453			773			3441				
v/s Ratio Prot					c0.15							
v/s Ratio Perm		0.13						0.25				
v/c Ratio		0.58			0.64			0.37				
Uniform Delay, d1		31.0			31.5			6.0				
Progression Factor		0.30			1.00			1.00				
Incremental Delay, d2		1.0			1.4			0.3				
Delay (s)		10.3			32.9			6.3				
Level of Service		B			C			A				
Approach Delay (s)		10.3			32.9			6.3			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	500	0	240	0	0	0	0	1000	360	600	880	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	562	0	270	0	0	0	0	1124	404	674	989	0
RTOR Reduction (vph)	0	0	125	0	0	0	0	0	289	0	0	0
Lane Group Flow (vph)	562	0	145	0	0	0	0	1124	115	674	989	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	16.2		16.2					22.3	22.3	27.5	54.3	
Effective Green, g (s)	17.2		17.2					22.8	22.8	28.0	54.8	
Actuated g/C Ratio	0.21		0.21					0.29	0.29	0.35	0.68	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	738		340					1449	451	620	3483	
v/s Ratio Prot								c0.22		c0.38	0.19	
v/s Ratio Perm	c0.16		0.09						0.07			
v/c Ratio	0.76		0.43					0.78	0.26	1.09	0.28	
Uniform Delay, d1	29.5		27.1					26.3	22.1	26.0	4.9	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7		0.9					4.1	1.4	62.1	0.2	
Delay (s)	34.1		28.0					30.4	23.4	88.1	5.1	
Level of Service	C		C					C	C	F	A	
Approach Delay (s)		32.1			0.0			28.5			38.7	
Approach LOS		C			A			C			D	

Intersection Summary			
HCM Average Control Delay	33.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

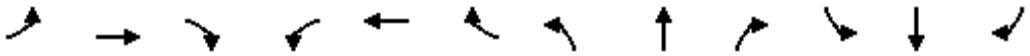
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

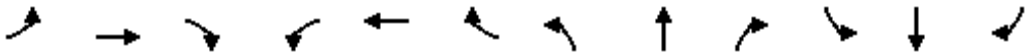
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

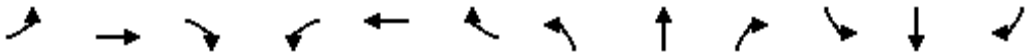
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.96			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3489			3380			5003				
Flt Permitted		0.75			1.00			1.00				
Satd. Flow (perm)		2665			3380			5003				
Volume (vph)	20	50	0	0	610	260	30	890	100	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	54	0	0	663	283	33	967	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	58	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	76	0	0	888	0	0	1092	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.1			28.1			42.5				
Effective Green, g (s)		28.6			28.6			43.4				
Actuated g/C Ratio		0.36			0.36			0.54				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		953			1208			2714				
v/s Ratio Prot					c0.26							
v/s Ratio Perm		0.03						0.22				
v/c Ratio		0.08			0.74			0.40				
Uniform Delay, d1		17.0			22.4			10.7				
Progression Factor		0.59			1.00			1.00				
Incremental Delay, d2		0.0			2.0			0.4				
Delay (s)		10.1			24.4			11.2				
Level of Service		B			C			B				
Approach Delay (s)		10.1			24.4			11.2			0.0	
Approach LOS		B			C			B			A	

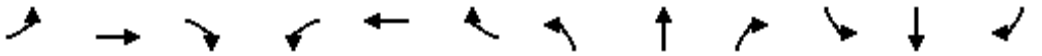
Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX D- CUMULATIVE SCENARIO LOS RESULTS



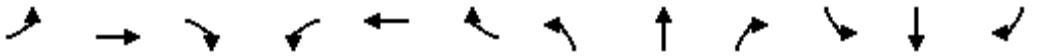
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3456		1770	3494		1770	3351		1770	3452	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3456		1770	3494		1770	3351		1770	3452	
Volume (vph)	50	785	146	142	1017	94	166	345	190	146	525	103
Peak-hour factor, PHF	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	68	1061	197	192	1374	127	224	466	257	197	709	139
RTOR Reduction (vph)	0	16	0	0	7	0	0	75	0	0	17	0
Lane Group Flow (vph)	68	1242	0	192	1494	0	224	648	0	197	831	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.2	33.3		13.5	39.6		9.3	27.0		9.3	27.0	
Effective Green, g (s)	7.2	34.6		13.5	40.9		8.3	27.6		8.3	27.6	
Actuated g/C Ratio	0.07	0.35		0.14	0.41		0.08	0.28		0.08	0.28	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	127	1196		239	1429		147	925		147	953	
v/s Ratio Prot	0.04	c0.36		0.11	c0.43		c0.13	0.19		0.11	c0.24	
v/s Ratio Perm												
v/c Ratio	0.54	1.04		0.80	1.05		1.52	0.70		1.34	0.87	
Uniform Delay, d1	44.8	32.7		42.0	29.6		45.9	32.5		45.9	34.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	36.6		16.6	36.8		267.1	4.4		191.6	10.9	
Delay (s)	47.0	69.3		58.5	66.3		313.0	36.9		237.5	45.4	
Level of Service	D	E		E	E		F	D		F	D	
Approach Delay (s)		68.2			65.4			102.2			81.6	
Approach LOS		E			E			F			F	

Intersection Summary			
HCM Average Control Delay	76.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3489		1770	3491		1770	3441		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3489		1770	3491		1770	3441		1770	1863	1583
Volume (vph)	132	752	78	97	1037	103	96	328	75	262	483	365
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	155	885	92	114	1220	121	113	386	88	308	568	429
RTOR Reduction (vph)	0	8	0	0	7	0	0	19	0	0	0	134
Lane Group Flow (vph)	155	969	0	114	1334	0	113	455	0	308	568	295
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	10.5	32.8		10.7	33.0		10.2	27.0		11.3	28.1	28.1
Effective Green, g (s)	10.5	34.1		10.7	34.3		10.2	27.9		11.3	29.0	29.0
Actuated g/C Ratio	0.10	0.34		0.11	0.34		0.10	0.28		0.11	0.29	0.29
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	4.9
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.0
Lane Grp Cap (vph)	186	1190		189	1197		181	960		200	540	459
v/s Ratio Prot	0.09	c0.28		0.06	c0.38		0.06	0.13		c0.17	c0.30	
v/s Ratio Perm												0.19
v/c Ratio	0.83	0.81		0.60	1.11		0.62	0.47		1.54	1.05	0.64
Uniform Delay, d1	43.9	30.1		42.6	32.9		43.1	29.9		44.4	35.5	31.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	26.1	6.2		5.3	63.3		6.6	0.1		266.4	53.1	2.3
Delay (s)	70.0	36.2		48.0	96.2		49.6	30.1		310.8	88.6	33.3
Level of Service	E	D		D	F		D	C		F	F	C
Approach Delay (s)		40.9			92.4			33.8			122.8	
Approach LOS		D			F			C			F	

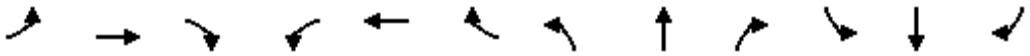
Intersection Summary			
HCM Average Control Delay	80.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3509		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.31	1.00		0.67	1.00	1.00	0.69	1.00	1.00
Satd. Flow (perm)	466	3539	1583	573	3509		1250	1863	1583	1284	3539	1583
Volume (vph)	4	647	198	156	990	59	206	91	100	98	111	16
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	5	744	228	179	1138	68	237	105	115	113	128	18
RTOR Reduction (vph)	0	0	137	0	11	0	0	0	55	0	0	11
Lane Group Flow (vph)	5	744	91	179	1195	0	237	105	60	113	128	7
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	229	1404		500	745	633	514	1416	633
v/s Ratio Prot		0.21			c0.34			0.06			0.04	
v/s Ratio Perm	0.01		0.06	0.31			c0.19		0.04	0.09		0.00
v/c Ratio	0.03	0.53	0.14	0.78	0.85		0.47	0.14	0.09	0.22	0.09	0.01
Uniform Delay, d1	7.3	9.1	7.6	10.5	10.9		8.9	7.6	7.5	7.9	7.5	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.95	1.99	3.18	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.4	0.5	22.8	6.7		2.5	0.3	0.2	1.0	0.1	0.0
Delay (s)	7.5	10.5	8.1	33.3	17.6		19.9	15.5	24.0	8.9	7.6	7.3
Level of Service	A	B	A	C	B		B	B	C	A	A	A
Approach Delay (s)		9.9			19.6			19.9			8.1	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

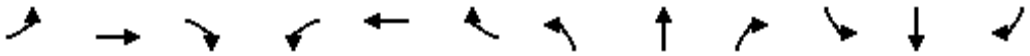


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3469		1770	1863	1583	1770	3416	
Flt Permitted	0.21	1.00	1.00	0.32	1.00		0.22	1.00	1.00	0.19	1.00	
Satd. Flow (perm)	389	1863	1583	598	3469		410	1863	1583	353	3416	
Volume (vph)	98	301	81	113	504	77	84	503	108	68	521	158
Peak-hour factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Adj. Flow (vph)	140	430	116	161	720	110	120	719	154	97	744	226
RTOR Reduction (vph)	0	0	51	0	21	0	0	0	76	0	44	0
Lane Group Flow (vph)	140	430	65	161	809	0	120	719	78	97	926	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	21.6	21.6	21.6	21.6	21.6		30.4	30.4	30.4	30.4	30.4	
Effective Green, g (s)	21.6	21.6	21.6	21.6	21.6		30.4	30.4	30.4	30.4	30.4	
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36		0.51	0.51	0.51	0.51	0.51	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	140	671	570	215	1249		208	944	802	179	1731	
v/s Ratio Prot		0.23			0.23			c0.39			0.27	
v/s Ratio Perm	c0.36		0.04	0.27			0.29		0.05	0.27		
v/c Ratio	1.00	0.64	0.11	0.75	0.65		0.58	0.76	0.10	0.54	0.53	
Uniform Delay, d1	19.2	16.0	12.8	16.8	16.0		10.3	11.9	7.7	10.1	10.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	76.1	2.1	0.1	13.3	1.2		11.1	5.8	0.2	11.3	1.2	
Delay (s)	95.3	18.1	12.9	30.1	17.2		21.5	17.7	7.9	21.3	11.2	
Level of Service	F	B	B	C	B		C	B	A	C	B	
Approach Delay (s)		33.0			19.3			16.6			12.1	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3435			3491						5046	
Flt Permitted		1.00			0.63						1.00	
Satd. Flow (perm)		3435			2227						5046	
Volume (vph)	0	400	97	173	452	0	0	0	0	49	1884	88
Peak-hour factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	444	108	188	491	0	0	0	0	53	2048	96
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	545	0	0	679	0	0	0	0	0	2190	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		34.7			34.7						45.9	
Effective Green, g (s)		35.2			35.2						46.8	
Actuated g/C Ratio		0.39			0.39						0.52	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1343			871						2624	
v/s Ratio Prot		0.16										
v/s Ratio Perm					c0.30						0.43	
v/c Ratio		0.41			0.78						0.83	
Uniform Delay, d1		19.8			24.0						18.3	
Progression Factor		1.00			0.39						1.00	
Incremental Delay, d2		0.1			3.5						3.3	
Delay (s)		19.9			12.8						21.6	
Level of Service		B			B						C	
Approach Delay (s)		19.9			12.8			0.0			21.6	
Approach LOS		B			B			A			C	

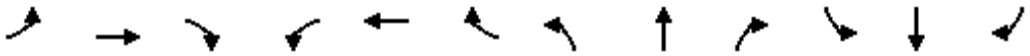
Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1856		1770	1783		1770	1812	
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.68	1.00		0.68	1.00	
Satd. Flow (perm)	466	1863	1583	466	1856		1264	1783		1264	1812	
Volume (vph)	42	529	16	72	657	16	14	72	29	20	83	18
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	51	637	19	87	792	19	17	87	35	24	100	22
RTOR Reduction (vph)	0	0	11	0	2	0	0	21	0	0	13	0
Lane Group Flow (vph)	51	637	8	87	809	0	17	101	0	24	109	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	186	745	633	186	742		506	713		506	725	
v/s Ratio Prot		0.34			c0.44			0.06			c0.06	
v/s Ratio Perm	0.11		0.00	0.19			0.01			0.02		
v/c Ratio	0.27	0.86	0.01	0.47	1.09		0.03	0.14		0.05	0.15	
Uniform Delay, d1	8.1	10.9	7.2	8.9	12.0		7.3	7.6		7.3	7.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.6	12.0	0.0	8.2	60.2		0.1	0.4		0.2	0.4	
Delay (s)	11.7	23.0	7.3	17.1	72.2		7.4	8.0		7.5	8.1	
Level of Service	B	C	A	B	E		A	A		A	A	
Approach Delay (s)		21.7			66.8			8.0			8.0	
Approach LOS		C			E			A			A	

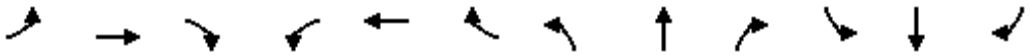
Intersection Summary					
HCM Average Control Delay	41.1	HCM Level of Service	D		
HCM Volume to Capacity ratio	0.62				
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B		
Analysis Period (min)	15				

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1818		1770	1826		1770	1814		1770	1826	
Flt Permitted	0.22	1.00		0.22	1.00		0.51	1.00		0.48	1.00	
Satd. Flow (perm)	414	1818		414	1826		956	1814		888	1826	
Volume (vph)	36	364	70	35	407	62	74	271	57	72	253	38
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	43	439	84	42	490	75	89	327	69	87	305	46
RTOR Reduction (vph)	0	11	0	0	9	0	0	13	0	0	9	0
Lane Group Flow (vph)	43	512	0	42	556	0	89	383	0	87	342	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	18.0	18.0		17.0	17.0		34.0	34.0		33.5	33.5	
Effective Green, g (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.57	0.57		0.57	0.57	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	124	545		124	548		542	1028		503	1035	
v/s Ratio Prot		0.28			c0.30			c0.21			0.19	
v/s Ratio Perm	0.10			0.10			0.09			0.10		
v/c Ratio	0.35	0.94		0.34	1.01		0.16	0.37		0.17	0.33	
Uniform Delay, d1	16.4	20.5		16.4	21.0		6.2	7.1		6.2	6.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	24.1		1.6	42.1		0.7	1.0		0.7	0.9	
Delay (s)	18.1	44.5		18.0	63.1		6.9	8.2		7.0	7.8	
Level of Service	B	D		B	E		A	A		A	A	
Approach Delay (s)		42.5			60.0			7.9			7.6	
Approach LOS		D			E			A			A	

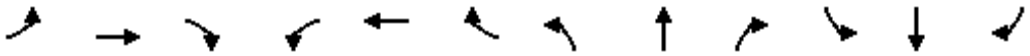
Intersection Summary			
HCM Average Control Delay	32.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1814		1770	1803		1770	1863	1583	1770	1844	
Flt Permitted	0.37	1.00		0.57	1.00		0.26	1.00	1.00	0.35	1.00	
Satd. Flow (perm)	680	1814		1059	1803		479	1863	1583	656	1844	
Volume (vph)	10	215	45	164	333	91	78	435	147	98	483	35
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	234	49	178	362	99	85	473	160	107	525	38
RTOR Reduction (vph)	0	19	0	0	25	0	0	0	96	0	7	0
Lane Group Flow (vph)	11	264	0	178	436	0	85	473	64	107	556	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	272	726		424	721		192	745	633	262	738	
v/s Ratio Prot		0.15			c0.24			0.25			c0.30	
v/s Ratio Perm	0.02			0.17			0.18		0.04	0.16		
v/c Ratio	0.04	0.36		0.42	0.61		0.44	0.63	0.10	0.41	0.75	
Uniform Delay, d1	7.3	8.4		8.7	9.5		8.7	9.7	7.5	8.6	10.3	
Progression Factor	1.00	1.00		1.00	1.00		1.23	1.28	3.01	1.00	1.03	
Incremental Delay, d2	0.3	1.4		3.0	3.7		6.7	3.8	0.3	4.5	6.8	
Delay (s)	7.6	9.8		11.7	13.2		17.5	16.1	22.9	13.1	17.4	
Level of Service	A	A		B	B		B	B	C	B	B	
Approach Delay (s)		9.8			12.8			17.8			16.7	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



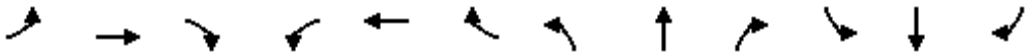
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1818		1770	1786		1770	3471		1770	3437	
Flt Permitted	0.35	1.00		0.61	1.00		0.33	1.00		0.40	1.00	
Satd. Flow (perm)	658	1818		1133	1786		606	3471		752	3437	
Volume (vph)	70	187	36	84	315	120	94	471	70	102	530	126
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	203	39	91	342	130	102	512	76	111	576	137
RTOR Reduction (vph)	0	17	0	0	34	0	0	29	0	0	52	0
Lane Group Flow (vph)	76	225	0	91	438	0	102	559	0	111	661	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	263	727		453	714		242	1388		301	1375	
v/s Ratio Prot		0.12			c0.25			0.16			c0.19	
v/s Ratio Perm	0.12			0.08			0.17			0.15		
v/c Ratio	0.29	0.31		0.20	0.61		0.42	0.40		0.37	0.48	
Uniform Delay, d1	8.1	8.2		7.8	9.5		8.7	8.6		8.4	8.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	1.1		1.0	3.9		5.3	0.9		3.5	1.2	
Delay (s)	10.9	9.3		8.8	13.4		14.0	9.5		11.9	10.1	
Level of Service	B	A		A	B		B	A		B	B	
Approach Delay (s)		9.7			12.7			10.1			10.4	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

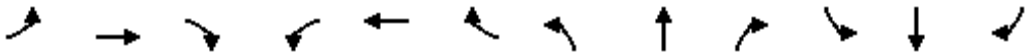
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3407			3502						5026	
Flt Permitted		1.00			0.65						1.00	
Satd. Flow (perm)		3407			2311						5026	
Volume (vph)	0	322	107	78	286	0	0	0	0	31	1692	135
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	350	116	85	311	0	0	0	0	34	1839	147
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	446	0	0	396	0	0	0	0	0	2010	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		20.2			20.2						59.9	
Effective Green, g (s)		21.2			21.2						60.8	
Actuated g/C Ratio		0.24			0.24						0.68	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		803			544						3395	
v/s Ratio Prot		0.13										
v/s Ratio Perm					c0.17						0.40	
v/c Ratio		0.56			0.73						0.59	
Uniform Delay, d1		30.3			31.7						7.9	
Progression Factor		1.00			0.34						0.99	
Incremental Delay, d2		0.5			3.7						0.5	
Delay (s)		30.7			14.4						8.4	
Level of Service		C			B						A	
Approach Delay (s)		30.7			14.4			0.0			8.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

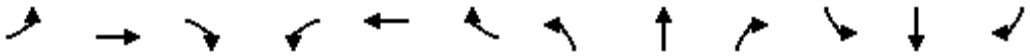
Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1753		1770	1815		1770	3489		1770	3515	
Flt Permitted	0.63	1.00		0.57	1.00		0.32	1.00		0.35	1.00	
Satd. Flow (perm)	1168	1753		1061	1815		601	3489		656	3515	
Volume (vph)	58	156	101	101	157	33	91	551	57	13	623	30
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	64	171	111	111	173	36	100	605	63	14	685	33
RTOR Reduction (vph)	0	58	0	0	19	0	0	20	0	0	8	0
Lane Group Flow (vph)	64	224	0	111	190	0	100	648	0	14	710	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	467	701		424	726		240	1396		262	1406	
v/s Ratio Prot		c0.13			0.10			0.19			c0.20	
v/s Ratio Perm	0.05			0.10			0.17			0.02		
v/c Ratio	0.14	0.32		0.26	0.26		0.42	0.46		0.05	0.50	
Uniform Delay, d1	7.6	8.3		8.0	8.0		8.6	8.8		7.4	9.0	
Progression Factor	1.00	1.00		1.00	1.00		0.91	0.91		0.82	0.93	
Incremental Delay, d2	0.6	1.2		1.5	0.9		4.8	1.0		0.3	1.0	
Delay (s)	8.2	9.5		9.5	8.9		12.7	9.1		6.3	9.4	
Level of Service	A	A		A	A		B	A		A	A	
Approach Delay (s)		9.2			9.1			9.6			9.3	
Approach LOS		A			A			A			A	

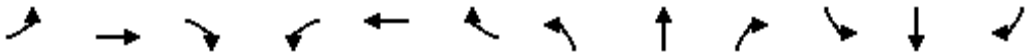
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



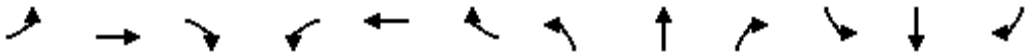
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3415		1770	1832		1770	1770	
Flt Permitted	0.35	1.00	1.00	0.54	1.00		0.37	1.00		0.44	1.00	
Satd. Flow (perm)	654	1863	1583	1002	3415		683	1832		812	1770	
Volume (vph)	125	193	60	68	347	106	69	372	45	73	338	167
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	140	217	67	76	390	119	78	418	51	82	380	188
RTOR Reduction (vph)	0	0	50	0	58	0	0	5	0	0	22	0
Lane Group Flow (vph)	140	217	17	76	451	0	78	464	0	82	546	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	15.5	15.5	15.5	15.5	15.5		36.5	36.5		36.5	36.5	
Effective Green, g (s)	15.5	15.5	15.5	15.5	15.5		36.5	36.5		36.5	36.5	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26		0.61	0.61		0.61	0.61	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	169	481	409	259	882		415	1114		494	1077	
v/s Ratio Prot		0.12			0.13			0.25			c0.31	
v/s Ratio Perm	c0.21		0.01	0.08			0.11			0.10		
v/c Ratio	0.83	0.45	0.04	0.29	0.51		0.19	0.42		0.17	0.51	
Uniform Delay, d1	21.0	18.7	16.7	17.9	19.0		5.2	6.2		5.1	6.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.1	0.7	0.0	0.6	0.5		1.0	1.1		0.7	1.7	
Delay (s)	48.1	19.4	16.7	18.5	19.5		6.2	7.3		5.8	8.4	
Level of Service	D	B	B	B	B		A	A		A	A	
Approach Delay (s)		28.4			19.4			7.1			8.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						1.00	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3413			3496						5059	
Flt Permitted		1.00			0.66						1.00	
Satd. Flow (perm)		3413			2347						5059	
Volume (vph)	0	301	94	143	430	0	0	0	0	31	1916	60
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	327	102	155	467	0	0	0	0	34	2083	65
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	419	0	0	622	0	0	0	0	0	2178	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		22.1			22.1						57.0	
Effective Green, g (s)		24.1			24.1						57.9	
Actuated g/C Ratio		0.27			0.27						0.64	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		914			628						3255	
v/s Ratio Prot		0.12										
v/s Ratio Perm					c0.26						0.43	
v/c Ratio		0.46			0.99						0.67	
Uniform Delay, d1		27.5			32.8						10.1	
Progression Factor		1.00			0.39						0.41	
Incremental Delay, d2		0.1			29.8						0.9	
Delay (s)		27.6			42.7						5.1	
Level of Service		C			D						A	
Approach Delay (s)		27.6			42.7			0.0			5.1	
Approach LOS		C			D			A			A	

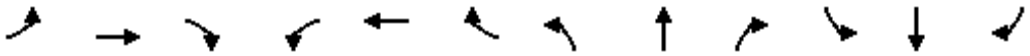
Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	247	0	0	364	34	42	138	11	29	0	64
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	56	309	0	0	455	42	52	172	14	36	0	80

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	365	498	53	186	116
Volume Left (vph)	56	0	53	0	36
Volume Right (vph)	0	43	0	14	80
Hadj (s)	0.06	-0.02	0.53	-0.02	-0.32
Departure Headway (s)	6.2	5.8	7.9	7.3	7.0
Degree Utilization, x	0.62	0.81	0.11	0.38	0.23
Capacity (veh/h)	555	593	424	454	454
Control Delay (s)	18.8	28.9	10.7	13.5	12.0
Approach Delay (s)	18.8	28.9	12.9		12.0
Approach LOS	C	D	B		B

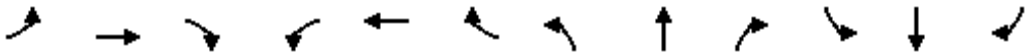
Intersection Summary				
Delay	21.1			
HCM Level of Service	C			
Intersection Capacity Utilization	63.5%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	70	186	28	28	293	84	48	318	35	83	272	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	202	30	30	318	91	52	346	38	90	296	91

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	309	440	436	477
Volume Left (vph)	76	30	52	90
Volume Right (vph)	30	91	38	91
Hadj (s)	0.02	-0.08	0.01	-0.04
Departure Headway (s)	9.6	9.0	9.1	9.1
Degree Utilization, x	0.82	1.10	1.10	1.20
Capacity (veh/h)	371	395	405	402
Control Delay (s)	44.3	106.5	106.6	140.8
Approach Delay (s)	44.3	106.5	106.6	140.8
Approach LOS	E	F	F	F

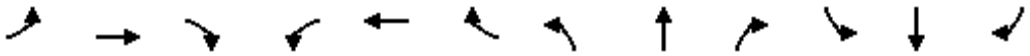
Intersection Summary			
Delay	104.8		
HCM Level of Service	F		
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1831		1770	1863	1583	1770	3477		1770	3493	
Flt Permitted	0.60	1.00		0.61	1.00	1.00	0.25	1.00		0.31	1.00	
Satd. Flow (perm)	1122	1831		1135	1863	1583	466	3477		580	3493	
Volume (vph)	60	196	25	63	233	60	40	599	79	28	799	75
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	213	27	68	253	65	43	651	86	30	868	82
RTOR Reduction (vph)	0	11	0	0	0	39	0	26	0	0	17	0
Lane Group Flow (vph)	65	229	0	68	253	26	43	711	0	30	933	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	449	732		454	745	633	186	1391		232	1397	
v/s Ratio Prot		0.12			c0.14			0.20			c0.27	
v/s Ratio Perm	0.06			0.06		0.02	0.09			0.05		
v/c Ratio	0.14	0.31		0.15	0.34	0.04	0.23	0.51		0.13	0.67	
Uniform Delay, d1	7.6	8.2		7.7	8.3	7.3	7.9	9.1		7.6	9.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.82	0.94	
Incremental Delay, d2	0.7	1.1		0.7	1.2	0.1	2.9	1.3		1.1	2.3	
Delay (s)	8.3	9.3		8.4	9.6	7.4	10.8	10.4		7.3	11.6	
Level of Service	A	A		A	A	A	B	B		A	B	
Approach Delay (s)		9.1			9.0			10.4			11.4	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

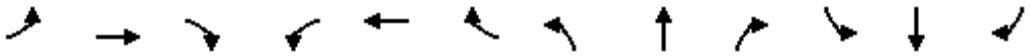


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.90			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3189			3433						5068	
Flt Permitted		1.00			0.67						1.00	
Satd. Flow (perm)		3189			2384						5068	
Volume (vph)	0	83	161	469	298	2	0	0	0	18	2110	44
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	90	175	510	324	2	0	0	0	20	2293	48
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	263	0	0	836	0	0	0	0	0	2358	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		29.0			29.0						41.6	
Effective Green, g (s)		29.5			29.5						42.5	
Actuated g/C Ratio		0.37			0.37						0.53	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1176			879						2692	
v/s Ratio Prot		0.08										
v/s Ratio Perm					c0.35						0.47	
v/c Ratio		0.22			1.28dl						0.88	
Uniform Delay, d1		17.4			24.5						16.4	
Progression Factor		1.00			0.31						1.00	
Incremental Delay, d2		0.0			10.1						4.4	
Delay (s)		17.4			17.6						20.8	
Level of Service		B			B						C	
Approach Delay (s)		17.4			17.6			0.0			20.8	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

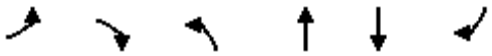
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	177	0	0	317	11	766	194	84	0	0	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	17	216	0	0	387	13	934	237	102	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	233	400	623	650
Volume Left (vph)	17	0	623	311
Volume Right (vph)	0	13	0	102
Hadj (s)	0.05	0.01	0.53	0.16
Departure Headway (s)	6.7	6.3	7.0	6.7
Degree Utilization, x	0.43	0.70	1.22	1.20
Capacity (veh/h)	528	563	519	547
Control Delay (s)	14.7	22.8	136.8	129.8
Approach Delay (s)	14.7	22.8	133.2	
Approach LOS	B	C	F	

Intersection Summary				
Delay		95.5		
HCM Level of Service		F		
Intersection Capacity Utilization		56.4%	ICU Level of Service	B
Analysis Period (min)		15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4843	
Flt Permitted					1.00	
Satd. Flow (perm)					4843	
Volume (vph)	0	0	0	0	1864	869
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2026	945
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2971	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4843	
v/s Ratio Prot					c0.61	
v/s Ratio Perm						
v/c Ratio					0.61	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.6	
Delay (s)					0.6	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.6	
Approach LOS	A			A	A	

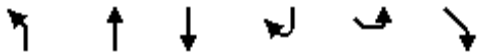
Intersection Summary			
HCM Average Control Delay	0.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.96			
Flt Protected			1.00			
Satd. Flow (prot)			4884			
Flt Permitted			1.00			
Satd. Flow (perm)			4884			
Volume (vph)	0	0	1385	497	0	0
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	1522	546	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2068	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4884			
v/s Ratio Prot			c0.42			
v/s Ratio Perm						
v/c Ratio			0.42			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.3			
Delay (s)			0.3			
Level of Service			A			
Approach Delay (s)	0.0		0.3		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



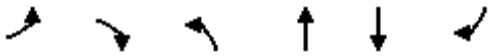
Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary					
Delay		0.0			
HCM Level of Service		A			
Intersection Capacity Utilization		0.0%	ICU Level of Service		A
Analysis Period (min)		15			

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

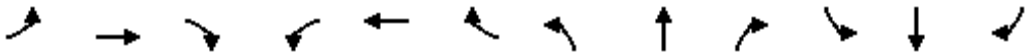


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

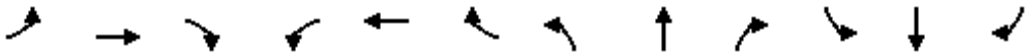


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3512		3433	3539	1583	1770	5005	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3512		3433	3539	1583	1770	5005	
Volume (vph)	258	577	174	424	961	52	259	657	187	184	1502	177
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	280	627	189	461	1045	57	282	714	203	200	1633	192
RTOR Reduction (vph)	0	0	131	0	4	0	0	0	140	0	13	0
Lane Group Flow (vph)	280	627	58	461	1099	0	282	714	63	200	1812	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	12.5	31.0	31.0	13.5	32.0		12.5	32.5	32.5	13.5	33.5	
Effective Green, g (s)	13.5	32.0	32.0	14.5	33.0		12.5	34.0	34.0	13.5	35.0	
Actuated g/C Ratio	0.12	0.29	0.29	0.13	0.30		0.11	0.31	0.31	0.12	0.32	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	421	1030	461	453	1054		390	1094	489	217	1593	
v/s Ratio Prot	0.08	0.18		c0.13	c0.31		0.08	c0.20		0.11	c0.36	
v/s Ratio Perm			0.04						0.04			
v/c Ratio	0.67	0.61	0.13	1.02	1.04		0.72	0.65	0.13	0.92	1.14	
Uniform Delay, d1	46.1	33.6	28.7	47.8	38.5		47.1	32.9	27.3	47.7	37.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.6	0.9	0.1	46.8	39.4		6.1	3.0	0.5	39.9	70.1	
Delay (s)	49.6	34.5	28.8	94.6	77.9		53.2	35.9	27.9	87.6	107.6	
Level of Service	D	C	C	F	E		D	D	C	F	F	
Approach Delay (s)		37.4			82.8			38.6			105.7	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM Average Control Delay	73.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

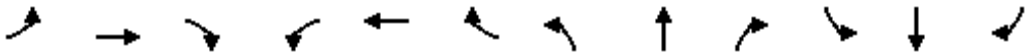
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			0.98				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3519			3501			4966				
Flt Permitted		0.79			1.00			1.00				
Satd. Flow (perm)		2782			3501			4966				
Volume (vph)	46	353	0	0	625	49	103	1154	194	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	384	0	0	679	53	112	1254	211	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	434	0	0	727	0	0	1548	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.7			34.7			45.9				
Effective Green, g (s)		35.2			35.2			46.8				
Actuated g/C Ratio		0.39			0.39			0.52				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		1088			1369			2582				
v/s Ratio Prot					c0.21							
v/s Ratio Perm		0.16						0.31				
v/c Ratio		0.40			0.53			0.60				
Uniform Delay, d1		19.8			21.1			15.1				
Progression Factor		0.27			1.00			1.16				
Incremental Delay, d2		0.1			0.2			1.0				
Delay (s)		5.4			21.3			18.4				
Level of Service		A			C			B				
Approach Delay (s)		5.4			21.3			18.4			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



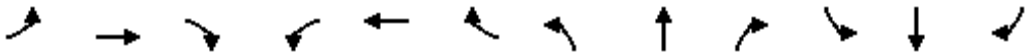
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3480			3488			5051				
Flt Permitted		0.62			1.00			1.00				
Satd. Flow (perm)		2180			3488			5051				
Volume (vph)	121	233	0	0	364	39	88	1138	28	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	132	253	0	0	396	42	96	1237	30	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	385	0	0	429	0	0	1360	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.2			20.2			59.9				
Effective Green, g (s)		21.2			21.2			60.8				
Actuated g/C Ratio		0.24			0.24			0.68				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		514			822			3412				
v/s Ratio Prot					0.12							
v/s Ratio Perm		c0.18						0.27				
v/c Ratio		0.75			0.52			0.40				
Uniform Delay, d1		31.9			30.0			6.5				
Progression Factor		0.31			1.00			0.67				
Incremental Delay, d2		4.4			0.3			0.3				
Delay (s)		14.2			30.3			4.7				
Level of Service		B			C			A				
Approach Delay (s)		14.2			30.3			4.7			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



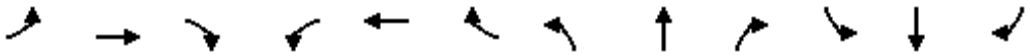
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			1.00				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3497			3467			5046				
Flt Permitted		0.61			1.00			1.00				
Satd. Flow (perm)		2166			3467			5046				
Volume (vph)	77	239	0	0	459	72	115	1386	42	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	260	0	0	499	78	125	1507	46	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	344	0	0	563	0	0	1675	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		22.1			22.1			57.0				
Effective Green, g (s)		24.1			24.1			57.9				
Actuated g/C Ratio		0.27			0.27			0.64				
Clearance Time (s)		6.0			6.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		580			928			3246				
v/s Ratio Prot					c0.16							
v/s Ratio Perm		0.16						0.33				
v/c Ratio		0.59			0.61			0.52				
Uniform Delay, d1		28.7			28.8			8.6				
Progression Factor		0.23			1.00			1.00				
Incremental Delay, d2		1.0			0.8			0.6				
Delay (s)		7.6			29.6			9.2				
Level of Service		A			C			A				
Approach Delay (s)		7.6			29.6			9.2			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	625	0	298	0	0	0	0	1252	458	749	1109	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	702	0	335	0	0	0	0	1407	515	842	1246	0
RTOR Reduction (vph)	0	0	73	0	0	0	0	0	320	0	0	0
Lane Group Flow (vph)	702	0	262	0	0	0	0	1407	195	842	1246	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	17.0		17.0					23.0	23.0	26.0	53.5	
Effective Green, g (s)	18.0		18.0					23.5	23.5	26.5	54.0	
Actuated g/C Ratio	0.22		0.22					0.29	0.29	0.33	0.68	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	772		356					1494	465	586	3432	
v/s Ratio Prot								c0.28		c0.48	0.25	
v/s Ratio Perm	c0.20		0.17						0.12			
v/c Ratio	0.91		0.74					0.94	0.42	1.44	0.36	
Uniform Delay, d1	30.2		28.8					27.6	22.8	26.8	5.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.5		7.7					13.0	2.8	206.2	0.3	
Delay (s)	44.7		36.5					40.6	25.5	233.0	5.9	
Level of Service	D		D					D	C	F	A	
Approach Delay (s)		42.1			0.0			36.6			97.5	
Approach LOS		D			A			D			F	

Intersection Summary			
HCM Average Control Delay	62.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

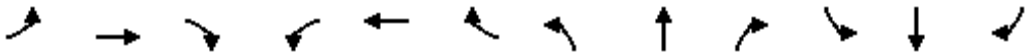
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

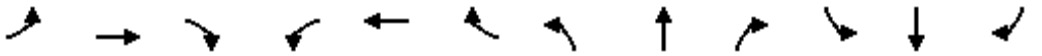
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3494		1770	3489		1770	3382		1770	3406	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3494		1770	3489		1770	3382		1770	3406	
Volume (vph)	145	1480	137	118	1154	122	157	486	204	127	333	112
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	190	1942	180	155	1515	160	206	638	268	167	437	147
RTOR Reduction (vph)	0	6	0	0	7	0	0	42	0	0	30	0
Lane Group Flow (vph)	190	2116	0	155	1668	0	206	864	0	167	554	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	14.3	46.4		12.7	44.8		8.7	25.3		8.7	25.3	
Effective Green, g (s)	14.3	47.7		12.7	46.1		7.7	25.9		7.7	25.9	
Actuated g/C Ratio	0.13	0.43		0.12	0.42		0.07	0.24		0.07	0.24	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	230	1515		204	1462		124	796		124	802	
v/s Ratio Prot	c0.11	c0.61		0.09	0.48		c0.12	c0.26		0.09	0.16	
v/s Ratio Perm												
v/c Ratio	0.83	1.40		0.76	1.14		1.66	1.09		1.35	0.69	
Uniform Delay, d1	46.6	31.1		47.2	31.9		51.1	42.0		51.1	38.4	
Progression Factor	1.00	1.00		1.06	0.77		1.00	1.00		1.00	1.00	
Incremental Delay, d2	20.0	182.5		1.3	64.3		330.4	57.6		200.0	2.1	
Delay (s)	66.7	213.7		51.1	88.8		381.6	99.6		251.2	40.5	
Level of Service	E	F		D	F		F	F		F	D	
Approach Delay (s)		201.6			85.6			151.9			87.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	142.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.6%	ICU Level of Service	H
Analysis Period (min)	15		

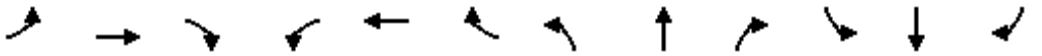
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3499		1770	3431		1770	3432		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3499		1770	3431		1770	3432		1770	1863	1583
Volume (vph)	218	1139	92	118	1064	273	135	477	121	254	376	200
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	286	1495	121	155	1396	358	177	626	159	333	494	262
RTOR Reduction (vph)	0	5	0	0	21	0	0	21	0	0	0	87
Lane Group Flow (vph)	286	1611	0	155	1733	0	177	764	0	333	494	175
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												6
Actuated Green, G (s)	11.3	44.2		10.7	43.6		6.7	30.2		6.7	30.2	43.6
Effective Green, g (s)	11.3	45.5		10.7	44.9		6.7	31.1		6.7	31.1	44.9
Actuated g/C Ratio	0.10	0.41		0.10	0.41		0.06	0.28		0.06	0.28	0.41
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	5.3
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.5
Lane Grp Cap (vph)	182	1447		172	1400		108	970		108	527	646
v/s Ratio Prot	c0.16	0.46		0.09	c0.51		0.10	0.22		c0.19	c0.27	
v/s Ratio Perm												0.11
v/c Ratio	1.57	1.11		0.90	1.24		1.64	0.79		3.08	0.94	0.27
Uniform Delay, d1	49.4	32.2		49.1	32.5		51.6	36.4		51.6	38.5	21.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	281.9	61.1		41.5	113.4		325.3	4.0		961.5	24.1	1.0
Delay (s)	331.3	93.4		90.6	146.0		376.9	40.4		1013.2	62.6	22.7
Level of Service	F	F		F	F		F	D		F	E	C
Approach Delay (s)		129.1			141.5			102.3			343.7	
Approach LOS		F			F			F			F	

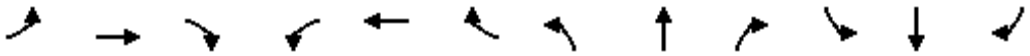
Intersection Summary			
HCM Average Control Delay	168.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3478		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.66	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	466	3539	1583	466	3478		1228	1863	1583	1122	3539	1583
Volume (vph)	28	1408	237	89	950	123	322	189	222	150	109	19
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	38	1887	318	119	1273	165	432	253	298	201	146	25
RTOR Reduction (vph)	0	0	191	0	25	0	0	0	1	0	0	8
Lane Group Flow (vph)	38	1887	127	119	1413	0	432	253	297	201	146	17
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	186	1391		491	745	633	449	1416	633
v/s Ratio Prot		c0.53			0.41			0.14			0.04	
v/s Ratio Perm	0.08		0.08	0.26			c0.35		0.19	0.18		0.01
v/c Ratio	0.20	1.33	0.20	0.64	1.02		0.88	0.34	0.47	0.45	0.10	0.03
Uniform Delay, d1	7.8	12.0	7.8	9.7	12.0		11.1	8.3	8.9	8.8	7.5	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.45	0.48	0.46	1.00	1.00	1.00
Incremental Delay, d2	2.5	154.6	0.7	15.7	28.1		2.3	0.1	0.2	3.2	0.1	0.1
Delay (s)	10.3	166.6	8.5	25.3	40.1		7.3	4.2	4.3	12.0	7.7	7.4
Level of Service	B	F	A	C	D		A	A	A	B	A	A
Approach Delay (s)		141.6			39.0			5.6			10.0	
Approach LOS		F			D			A			A	

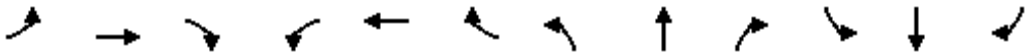
Intersection Summary			
HCM Average Control Delay	75.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3481		1770	1863	1583	1770	3482	
Flt Permitted	0.37	1.00	1.00	0.18	1.00		0.35	1.00	1.00	0.15	1.00	
Satd. Flow (perm)	692	1863	1583	334	3481		653	1863	1583	285	3482	
Volume (vph)	117	466	106	52	359	44	54	537	79	43	428	52
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	164	652	148	73	503	62	76	752	111	60	599	73
RTOR Reduction (vph)	0	0	41	0	16	0	0	0	56	0	15	0
Lane Group Flow (vph)	164	652	107	73	549	0	76	752	55	60	657	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	22.3	22.3	22.3	22.3	22.3		29.7	29.7	29.7	29.7	29.7	
Effective Green, g (s)	22.3	22.3	22.3	22.3	22.3		29.7	29.7	29.7	29.7	29.7	
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37		0.49	0.49	0.49	0.49	0.49	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	257	692	588	124	1294		323	922	784	141	1724	
v/s Ratio Prot		c0.35			0.16			c0.40			0.19	
v/s Ratio Perm	0.24		0.07	0.22			0.12		0.03	0.21		
v/c Ratio	0.64	0.94	0.18	0.59	0.42		0.24	0.82	0.07	0.43	0.38	
Uniform Delay, d1	15.5	18.2	12.7	15.2	14.1		8.7	12.8	7.9	9.7	9.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	21.1	0.1	7.0	0.2		1.7	7.9	0.2	9.1	0.6	
Delay (s)	20.7	39.4	12.8	22.1	14.3		10.4	20.7	8.1	18.8	10.1	
Level of Service	C	D	B	C	B		B	C	A	B	B	
Approach Delay (s)		32.1			15.2			18.4			10.8	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		3454			3481						5029	
Flt Permitted		1.00			0.54						1.00	
Satd. Flow (perm)		3454			1924						5029	
Volume (vph)	0	521	99	185	372	0	0	0	0	73	1336	86
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	714	136	253	509	0	0	0	0	100	1830	118
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	839	0	0	762	0	0	0	0	0	2041	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		28.1			28.1						52.5	
Effective Green, g (s)		28.6			28.6						53.4	
Actuated g/C Ratio		0.32			0.32						0.59	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1098			611						2984	
v/s Ratio Prot		0.24										
v/s Ratio Perm					c0.40						0.41	
v/c Ratio		0.76			2.98dl						0.68	
Uniform Delay, d1		27.7			30.7						12.5	
Progression Factor		1.00			0.32						1.00	
Incremental Delay, d2		2.9			118.0						1.3	
Delay (s)		30.6			127.7						13.8	
Level of Service		C			F						B	
Approach Delay (s)		30.6			127.7			0.0			13.8	
Approach LOS		C			F			A			B	

Intersection Summary			
HCM Average Control Delay	41.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1856		1770	1754		1770	1801	
Flt Permitted	0.20	1.00	1.00	0.20	1.00		0.68	1.00		0.60	1.00	
Satd. Flow (perm)	373	1863	1583	373	1856		1275	1754		1113	1801	
Volume (vph)	26	691	45	43	670	16	34	116	74	29	67	19
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	34	907	59	56	879	21	45	152	97	38	88	25
RTOR Reduction (vph)	0	0	37	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	34	907	22	56	899	0	45	243	0	38	107	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.60	0.60		0.60	0.60	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	107	532	452	107	530		765	1052		668	1081	
v/s Ratio Prot		c0.49			0.48			c0.14			0.06	
v/s Ratio Perm	0.09		0.01	0.15			0.04			0.03		
v/c Ratio	0.32	1.70	0.05	0.52	1.70		0.06	0.23		0.06	0.10	
Uniform Delay, d1	19.6	25.0	18.1	21.0	25.0		5.8	6.5		5.8	6.0	
Progression Factor	1.00	1.00	1.00	0.89	0.93		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	325.2	0.0	1.2	315.0		0.1	0.5		0.2	0.2	
Delay (s)	21.4	350.2	18.2	19.9	338.3		6.0	7.0		6.0	6.1	
Level of Service	C	F	B	B	F		A	A		A	A	
Approach Delay (s)		319.4			319.7			6.9			6.1	
Approach LOS		F			F			A			A	

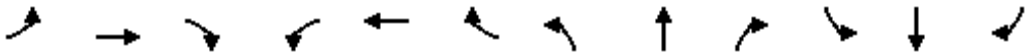
Intersection Summary			
HCM Average Control Delay	261.5	HCM Level of Service	F
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1844		1770	1818		1770	1819		1770	1833	
Flt Permitted	0.10	1.00		0.10	1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)	186	1844		186	1818		339	1819		339	1833	
Volume (vph)	96	618	44	72	584	111	54	427	79	64	393	47
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	144	927	66	108	876	166	81	640	118	96	590	70
RTOR Reduction (vph)	0	4	0	0	10	0	0	10	0	0	6	0
Lane Group Flow (vph)	144	989	0	108	1032	0	81	748	0	96	654	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	40.0	40.0		39.0	39.0		22.0	22.0		21.5	21.5	
Effective Green, g (s)	40.0	40.0		40.0	40.0		22.0	22.0		22.0	22.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57		0.31	0.31		0.31	0.31	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	1054		106	1039		107	572		107	576	
v/s Ratio Prot		0.54			0.57			c0.41			0.36	
v/s Ratio Perm	c0.77			0.58			0.24			0.28		
v/c Ratio	1.36	0.94		1.02	0.99		0.76	1.31		0.90	1.14	
Uniform Delay, d1	15.0	13.9		15.0	14.9		21.6	24.0		22.9	24.0	
Progression Factor	2.16	2.20		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	166.9	1.9		92.6	26.2		38.7	151.0		62.5	80.6	
Delay (s)	199.3	32.5		107.6	41.0		60.3	175.0		85.4	104.6	
Level of Service	F	C		F	D		E	F		F	F	
Approach Delay (s)		53.6			47.3			164.0			102.2	
Approach LOS		D			D			F			F	

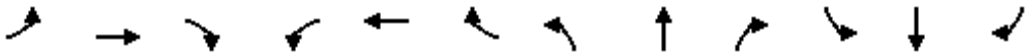
Intersection Summary			
HCM Average Control Delay	85.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	106.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



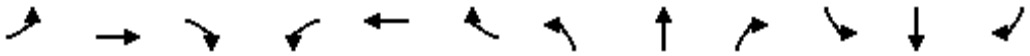
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1800		1770	1782		1770	1863	1583	1770	1853	
Flt Permitted	0.25	1.00		0.25	1.00		0.25	1.00	1.00	0.25	1.00	
Satd. Flow (perm)	466	1800		466	1782		466	1863	1583	466	1853	
Volume (vph)	25	339	98	98	317	128	39	588	170	117	513	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	34	464	134	134	434	175	53	805	233	160	703	26
RTOR Reduction (vph)	0	26	0	0	36	0	0	0	104	0	4	0
Lane Group Flow (vph)	34	572	0	134	573	0	53	805	129	160	725	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	186	720		186	713		186	745	633	186	741	
v/s Ratio Prot		0.32			c0.32			c0.43			0.39	
v/s Ratio Perm	0.07			0.29			0.11		0.08	0.34		
v/c Ratio	0.18	0.79		0.72	0.80		0.28	1.08	0.20	0.86	0.98	
Uniform Delay, d1	7.8	10.6		10.1	10.6		8.1	12.0	7.8	11.0	11.8	
Progression Factor	1.00	1.00		1.00	1.00		1.02	1.15	1.80	1.03	1.03	
Incremental Delay, d2	2.2	8.8		21.3	9.3		2.6	51.8	0.5	36.9	28.0	
Delay (s)	9.9	19.4		31.4	20.0		10.9	65.7	14.6	48.2	40.2	
Level of Service	A	B		C	B		B	E	B	D	D	
Approach Delay (s)		18.9			22.0			52.1			41.6	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.96		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1792		1770	3456		1770	3497	
Flt Permitted	0.47	1.00		0.25	1.00		0.25	1.00		0.25	1.00	
Satd. Flow (perm)	877	1795		466	1792		475	3456		466	3497	
Volume (vph)	92	317	101	82	199	68	39	546	102	70	566	49
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	126	434	138	112	273	93	53	748	140	96	775	67
RTOR Reduction (vph)	0	29	0	0	31	0	0	38	0	0	16	0
Lane Group Flow (vph)	126	543	0	112	335	0	53	850	0	96	826	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	351	718		186	717		190	1382		186	1399	
v/s Ratio Prot		c0.30			0.19			c0.25			0.24	
v/s Ratio Perm	0.14			0.24			0.11			0.21		
v/c Ratio	0.36	0.76		0.60	0.47		0.28	0.61		0.52	0.59	
Uniform Delay, d1	8.4	10.3		9.5	8.9		8.1	9.5		9.1	9.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	7.3		13.6	2.2		3.6	2.1		9.9	1.8	
Delay (s)	11.3	17.6		23.1	11.0		11.7	11.6		18.9	11.3	
Level of Service	B	B		C	B		B	B		B	B	
Approach Delay (s)		16.5			13.9			11.6			12.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

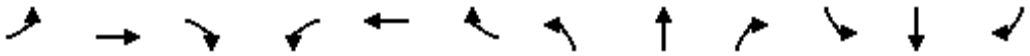


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3446			3419						5043	
Flt Permitted		1.00			0.62						1.00	
Satd. Flow (perm)		3446			2180						5043	
Volume (vph)	0	395	84	221	94	0	0	0	0	24	1382	75
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	513	109	287	122	0	0	0	0	31	1795	97
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	602	0	0	409	0	0	0	0	0	1917	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		21.1			21.1						59.0	
Effective Green, g (s)		22.1			22.1						59.9	
Actuated g/C Ratio		0.25			0.25						0.67	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		846			535						3356	
v/s Ratio Prot		0.17										
v/s Ratio Perm					c0.19						0.38	
v/c Ratio		0.71			3.02dl						0.57	
Uniform Delay, d1		31.0			31.5						8.1	
Progression Factor		1.00			0.36						1.66	
Incremental Delay, d2		2.4			4.7						0.5	
Delay (s)		33.4			16.2						14.0	
Level of Service		C			B						B	
Approach Delay (s)		33.4			16.2			0.0			14.0	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

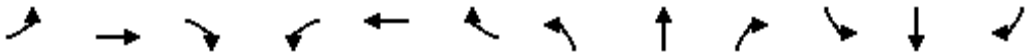
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



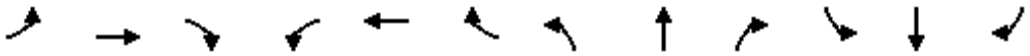
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1771		1770	1809		1770	3459		1770	3487	
Flt Permitted	0.60	1.00		0.48	1.00		0.27	1.00		0.25	1.00	
Satd. Flow (perm)	1114	1771		886	1809		499	3459		466	3487	
Volume (vph)	59	185	91	121	159	38	89	722	128	29	561	62
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	77	243	119	159	209	50	117	948	168	38	736	81
RTOR Reduction (vph)	0	44	0	0	22	0	0	36	0	0	21	0
Lane Group Flow (vph)	77	318	0	159	237	0	117	1080	0	38	796	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	446	708		354	724		200	1384		186	1395	
v/s Ratio Prot		c0.18			0.13			c0.31			0.23	
v/s Ratio Perm	0.07			0.18			0.23			0.08		
v/c Ratio	0.17	0.45		0.45	0.33		0.58	0.78		0.20	0.57	
Uniform Delay, d1	7.7	8.8		8.8	8.3		9.4	10.5		7.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		0.79	0.83		0.98	1.00	
Incremental Delay, d2	0.8	2.1		4.1	1.2		7.6	2.8		0.9	0.7	
Delay (s)	8.6	10.8		12.9	9.5		15.0	11.5		8.6	10.0	
Level of Service	A	B		B	A		B	B		A	A	
Approach Delay (s)		10.4			10.8			11.8			9.9	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	3411		1770	1837		1770	1863	1583
Flt Permitted	0.41	1.00	1.00	0.17	1.00		0.15	1.00		0.24	1.00	1.00
Satd. Flow (perm)	755	1863	1583	324	3411		285	1837		449	1863	1583
Volume (vph)	209	442	138	48	289	92	86	416	42	86	538	160
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	286	605	189	66	396	126	118	570	58	118	737	219
RTOR Reduction (vph)	0	0	90	0	51	0	0	6	0	0	0	89
Lane Group Flow (vph)	286	605	99	66	471	0	118	622	0	118	737	130
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0		29.0	29.0	29.0
Effective Green, g (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0		29.0	29.0	29.0
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38		0.48	0.48		0.48	0.48	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	289	714	607	124	1308		138	888		217	900	765
v/s Ratio Prot		0.32			0.14			0.34			0.40	
v/s Ratio Perm	c0.38		0.06	0.20			c0.41			0.26		0.08
v/c Ratio	0.99	0.85	0.16	0.53	0.36		0.86	0.70		0.54	0.82	0.17
Uniform Delay, d1	18.4	16.9	12.2	14.3	13.2		13.6	12.1		10.9	13.3	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.5	9.2	0.1	4.3	0.2		45.4	4.6		9.5	8.2	0.5
Delay (s)	67.9	26.1	12.3	18.7	13.4		59.0	16.7		20.3	21.5	9.2
Level of Service	E	C	B	B	B		E	B		C	C	A
Approach Delay (s)		34.7			14.0			23.4			18.8	
Approach LOS		C			B			C			B	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

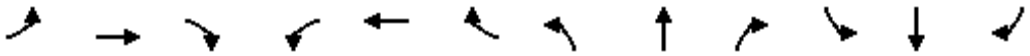


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3427			3495						5030	
Flt Permitted		1.00			0.53						1.00	
Satd. Flow (perm)		3427			1891						5030	
Volume (vph)	0	457	123	109	326	0	0	0	0	98	1825	115
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	626	168	149	446	0	0	0	0	134	2499	158
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	791	0	0	595	0	0	0	0	0	2784	0
Turn Type	Perm			Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases	4			8						6		
Actuated Green, G (s)		24.5			24.5						54.6	
Effective Green, g (s)		26.5			26.5						55.5	
Actuated g/C Ratio		0.29			0.29						0.62	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1009			557						3102	
v/s Ratio Prot		0.23										
v/s Ratio Perm					c0.31						0.55	
v/c Ratio		0.78			1.77dl						0.90	
Uniform Delay, d1		29.1			31.8						14.8	
Progression Factor		1.00			0.46						0.45	
Incremental Delay, d2		3.7			34.7						4.2	
Delay (s)		32.9			49.4						10.9	
Level of Service		C			D						B	
Approach Delay (s)		32.9			49.4			0.0			10.9	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

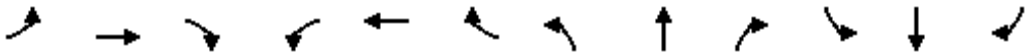
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	79	420	0	0	326	43	64	171	23	53	0	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	108	575	0	0	446	59	88	234	32	73	0	121

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	683	505	88	266	193
Volume Left (vph)	108	0	88	0	73
Volume Right (vph)	0	59	0	32	121
Hadj (s)	0.07	-0.04	0.53	-0.05	-0.27
Departure Headway (s)	7.5	7.4	9.1	8.5	8.6
Degree Utilization, x	1.43	1.04	0.22	0.63	0.46
Capacity (veh/h)	470	485	389	411	407
Control Delay (s)	225.0	79.2	13.4	23.5	18.7
Approach Delay (s)	225.0	79.2	21.0		18.7
Approach LOS	F	F	C		C

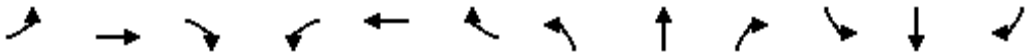
Intersection Summary				
Delay	118.0			
HCM Level of Service	F			
Intersection Capacity Utilization	95.2%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	147	350	48	23	294	70	33	358	30	91	376	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	201	479	66	32	403	96	45	490	41	125	515	119

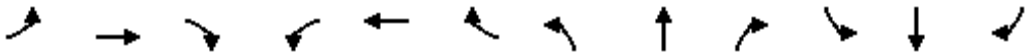
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	746	530	577	759
Volume Left (vph)	201	32	45	125
Volume Right (vph)	66	96	41	119
Hadj (s)	0.04	-0.06	0.01	-0.03
Departure Headway (s)	9.6	9.5	9.6	9.5
Degree Utilization, x	1.99	1.40	1.53	2.01
Capacity (veh/h)	381	388	389	383
Control Delay (s)	476.8	220.8	277.3	485.3
Approach Delay (s)	476.8	220.8	277.3	485.3
Approach LOS	F	F	F	F

Intersection Summary				
Delay	383.3			
HCM Level of Service	F			
Intersection Capacity Utilization	138.4%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1817		1770	1863	1583	1770	3496		1770	3497	
Flt Permitted	0.61	1.00		0.48	1.00	1.00	0.25	1.00		0.25	1.00	
Satd. Flow (perm)	1138	1817		894	1863	1583	466	3496		466	3497	
Volume (vph)	82	219	42	48	174	73	43	824	72	42	664	57
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	112	300	58	66	238	100	59	1129	99	58	909	78
RTOR Reduction (vph)	0	17	0	0	0	14	0	16	0	0	16	0
Lane Group Flow (vph)	112	341	0	66	238	86	59	1212	0	58	971	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	455	727		358	745	633	186	1398		186	1399	
v/s Ratio Prot		c0.19			0.13			c0.35			0.28	
v/s Ratio Perm	0.10			0.07		0.05	0.13			0.12		
v/c Ratio	0.25	0.47		0.18	0.32	0.14	0.32	0.87		0.31	0.69	
Uniform Delay, d1	8.0	8.9		7.8	8.3	7.6	8.2	11.0		8.2	10.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.93	0.95	
Incremental Delay, d2	1.3	2.2		1.1	1.1	0.4	4.4	7.5		3.7	2.5	
Delay (s)	9.3	11.0		8.9	9.4	8.1	12.7	18.5		11.4	11.9	
Level of Service	A	B		A	A	A	B	B		B	B	
Approach Delay (s)		10.6			9.0			18.2			11.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

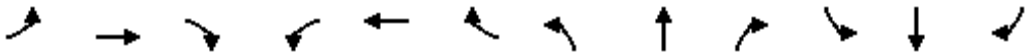


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.92			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3260			3435						5060	
Flt Permitted		1.00			0.65						1.00	
Satd. Flow (perm)		3260			2314						5060	
Volume (vph)	0	109	121	390	253	0	0	0	0	11	1753	57
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	143	159	512	332	0	0	0	0	14	2301	75
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	300	0	0	844	0	0	0	0	0	2386	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		32.2			32.2						43.4	
Effective Green, g (s)		32.7			32.7						44.3	
Actuated g/C Ratio		0.38			0.38						0.52	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1254			890						2637	
v/s Ratio Prot		0.09										
v/s Ratio Perm					c0.36						0.47	
v/c Ratio		0.24			1.31dl						0.90	
Uniform Delay, d1		17.7			25.3						18.4	
Progression Factor		1.00			0.31						1.00	
Incremental Delay, d2		0.0			2.7						5.7	
Delay (s)		17.8			10.6						24.2	
Level of Service		B			B						C	
Approach Delay (s)		17.8			10.6			0.0			24.2	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

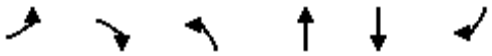
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	250	0	0	269	14	847	220	143	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	19	335	0	0	361	19	1135	295	192	0	0	0

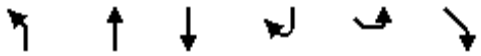
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	354	379	757	865
Volume Left (vph)	19	0	757	378
Volume Right (vph)	0	19	0	192
Hadj (s)	0.04	0.00	0.53	0.10
Departure Headway (s)	6.7	6.6	7.4	6.9
Degree Utilization, x	0.65	0.69	1.55	1.66
Capacity (veh/h)	526	540	493	526
Control Delay (s)	21.4	23.1	274.8	322.9
Approach Delay (s)	21.4	23.1	300.4	
Approach LOS	C	C	F	

Intersection Summary				
Delay	213.8			
HCM Level of Service	F			
Intersection Capacity Utilization	80.0%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4835	
Flt Permitted					1.00	
Satd. Flow (perm)					4835	
Volume (vph)	0	0	0	0	1721	841
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	2236	1092
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3328	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4835	
v/s Ratio Prot					c0.69	
v/s Ratio Perm						
v/c Ratio					0.69	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.8	
Delay (s)					0.8	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.8	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

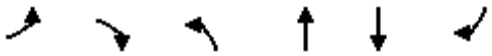
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

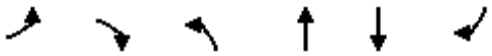
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		



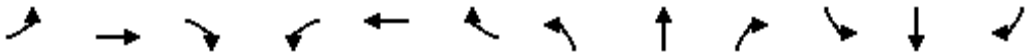
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #	
Volume Total (vph)	
Volume Left (vph)	
Volume Right (vph)	
Hadj (s)	
Departure Headway (s)	
Degree Utilization, x	
Capacity (veh/h)	
Control Delay (s)	
Approach Delay (s)	
Approach LOS	

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.97			
Flt Protected			1.00			
Satd. Flow (prot)			4922			
Flt Permitted			1.00			
Satd. Flow (perm)			4922			
Volume (vph)	0	0	1925	525	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	2501	682	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	3183	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4922			
v/s Ratio Prot			c0.65			
v/s Ratio Perm						
v/c Ratio			0.65			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.7			
Delay (s)			0.7			
Level of Service			A			
Approach Delay (s)	0.0		0.7		0.0	
Approach LOS	A		A		A	

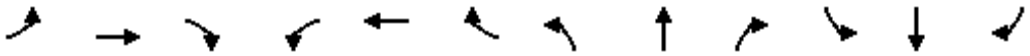
Intersection Summary			
HCM Average Control Delay	0.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Volume (vph)	272	1292	245	362	844	151	517	1003	323	195	804	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	373	1769	336	496	1156	207	708	1374	442	267	1101	68
RTOR Reduction (vph)	0	0	79	0	12	0	0	0	180	0	6	0
Lane Group Flow (vph)	373	1769	257	496	1351	0	708	1374	262	267	1163	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	16.4	28.7	28.7	19.8	32.1		12.5	29.5	29.5	12.5	29.5	
Effective Green, g (s)	17.4	29.7	29.7	20.8	33.1		12.5	31.0	31.0	12.5	31.0	
Actuated g/C Ratio	0.16	0.27	0.27	0.19	0.30		0.11	0.28	0.28	0.11	0.28	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	543	956	427	649	1041		390	997	446	201	1421	
v/s Ratio Prot	0.11	c0.50		c0.14	c0.39		c0.21	c0.39		c0.15	0.23	
v/s Ratio Perm			0.16						0.17			
v/c Ratio	0.69	1.85	0.60	0.76	1.30		1.82	1.38	0.59	1.33	0.82	
Uniform Delay, d1	43.7	40.1	35.0	42.3	38.5		48.8	39.5	34.0	48.8	36.9	
Progression Factor	0.70	1.28	1.50	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	383.1	0.2	5.1	141.2		376.9	176.5	5.6	177.9	5.3	
Delay (s)	31.0	434.3	52.7	47.4	179.7		425.7	216.0	39.6	226.6	42.2	
Level of Service	C	F	D	D	F		F	F	D	F	D	
Approach Delay (s)		321.8			144.4			243.9			76.5	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	215.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	119.9%	ICU Level of Service	H
Analysis Period (min)	15		

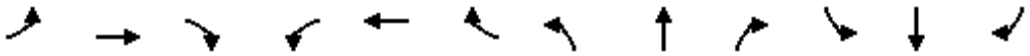
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.97			0.98				
Flt Protected		1.00			1.00			1.00				
Satd. Flow (prot)		3527			3444			4997				
Flt Permitted		0.67			1.00			1.00				
Satd. Flow (perm)		2369			3444			4997				
Volume (vph)	36	484	0	0	557	121	68	1801	219	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	49	663	0	0	763	166	93	2467	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	16	0	0	0	0
Lane Group Flow (vph)	0	712	0	0	927	0	0	2844	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.1			28.1			52.5				
Effective Green, g (s)		28.6			28.6			53.4				
Actuated g/C Ratio		0.32			0.32			0.59				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		753			1094			2965				
v/s Ratio Prot					0.27							
v/s Ratio Perm		c0.30						0.57				
v/c Ratio		0.95			0.85			0.96				
Uniform Delay, d1		29.9			28.7			17.3				
Progression Factor		0.31			1.00			1.26				
Incremental Delay, d2		14.7			6.0			7.4				
Delay (s)		24.0			34.6			29.2				
Level of Service		C			C			C				
Approach Delay (s)		24.0			34.6			29.2			0.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM Average Control Delay	29.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

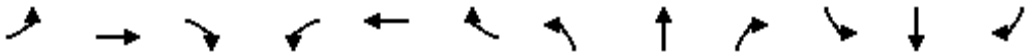


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3468			3474			5040				
Flt Permitted		0.59			1.00			1.00				
Satd. Flow (perm)		2087			3474			5040				
Volume (vph)	162	233	0	0	316	44	102	1745	81	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	210	303	0	0	410	57	132	2267	105	0	0	0
RTOR Reduction (vph)	0	0	0	0	8	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	513	0	0	459	0	0	2499	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.1			21.1			59.0				
Effective Green, g (s)		22.1			22.1			59.9				
Actuated g/C Ratio		0.25			0.25			0.67				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		512			853			3354				
v/s Ratio Prot					0.13							
v/s Ratio Perm		c0.25						0.50				
v/c Ratio		1.36dl			0.54			0.75				
Uniform Delay, d1		34.0			29.5			10.0				
Progression Factor		0.34			1.00			0.62				
Incremental Delay, d2		33.5			0.3			0.6				
Delay (s)		45.1			29.8			6.8				
Level of Service		D			C			A				
Approach Delay (s)		45.1			29.8			6.8			0.0	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

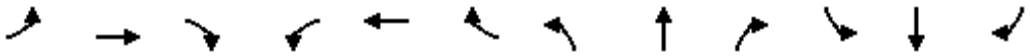


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0		4.0				
Lane Util. Factor		0.95			1.00	1.00		0.91				
Frt		1.00			1.00	0.85		0.99				
Flt Protected		0.99			1.00	1.00		1.00				
Satd. Flow (prot)		3501			1863	1583		5047				
Flt Permitted		0.55			1.00	1.00		1.00				
Satd. Flow (perm)		1955			1863	1583		5047				
Volume (vph)	99	357	0	0	435	109	92	1976	78	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	136	489	0	0	596	149	126	2706	107	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	5	0	0	0	0
Lane Group Flow (vph)	0	625	0	0	596	148	0	2934	0	0	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8		8	2					
Actuated Green, G (s)		24.5			24.5	24.5		54.6				
Effective Green, g (s)		26.5			26.5	26.5		55.5				
Actuated g/C Ratio		0.29			0.29	0.29		0.62				
Clearance Time (s)		6.0			6.0	6.0		4.9				
Vehicle Extension (s)		2.0			2.0	2.0		2.0				
Lane Grp Cap (vph)		576			549	466		3112				
v/s Ratio Prot					c0.32							
v/s Ratio Perm		0.32				0.09		0.58				
v/c Ratio		1.62dl			1.09	0.32		0.94				
Uniform Delay, d1		31.8			31.8	24.7		15.8				
Progression Factor		0.36			1.00	1.00		1.00				
Incremental Delay, d2		54.3			63.7	0.1		7.4				
Delay (s)		65.6			95.4	24.8		23.2				
Level of Service		E			F	C		C				
Approach Delay (s)		65.6			81.3			23.2			0.0	
Approach LOS		E			F			C			A	

Intersection Summary			
HCM Average Control Delay	39.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		

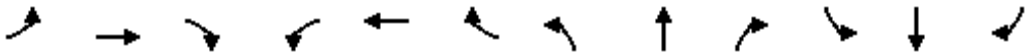
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3503			3335			5010				
Flt Permitted		0.65			1.00			1.00				
Satd. Flow (perm)		2292			3335			5010				
Volume (vph)	23	87	0	0	643	402	43	1587	162	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	30	114	0	0	844	528	56	2083	213	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	144	0	0	1369	0	0	2338	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		32.2			32.2			43.4				
Effective Green, g (s)		32.7			32.7			44.3				
Actuated g/C Ratio		0.38			0.38			0.52				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		882			1283			2611				
v/s Ratio Prot					c0.41							
v/s Ratio Perm		0.06						0.47				
v/c Ratio		0.16			1.07			0.90				
Uniform Delay, d1		17.2			26.1			18.3				
Progression Factor		0.25			1.00			1.00				
Incremental Delay, d2		0.0			45.1			5.3				
Delay (s)		4.3			71.2			23.6				
Level of Service		A			E			C				
Approach Delay (s)		4.3			71.2			23.6			0.0	
Approach LOS		A			E			C			A	

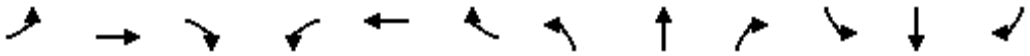
Intersection Summary			
HCM Average Control Delay	39.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	980	0	673	0	0	0	0	1474	390	594	1125	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	1273	0	874	0	0	0	0	1915	507	772	1461	0
RTOR Reduction (vph)	0	0	45	0	0	0	0	0	335	0	0	0
Lane Group Flow (vph)	1273	0	829	0	0	0	0	1915	172	772	1461	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	19.0		19.0					24.0	24.0	28.0	56.5	
Effective Green, g (s)	20.0		20.0					24.5	24.5	28.5	57.0	
Actuated g/C Ratio	0.24		0.24					0.29	0.29	0.34	0.67	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	2.0	4.0	
Lane Grp Cap (vph)	808		372					1466	456	593	3410	
v/s Ratio Prot								c0.38		c0.44	0.29	
v/s Ratio Perm	0.37		c0.52						0.11			
v/c Ratio	1.58		2.23					1.31	0.38	1.30	0.43	
Uniform Delay, d1	32.5		32.5					30.2	24.2	28.2	6.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	264.9		561.3					142.9	2.4	147.9	0.4	
Delay (s)	297.4		593.8					173.1	26.5	176.1	6.9	
Level of Service	F		F					F	C	F	A	
Approach Delay (s)		418.1			0.0			142.4			65.4	
Approach LOS		F			A			F			E	

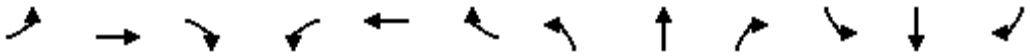
Intersection Summary			
HCM Average Control Delay	204.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

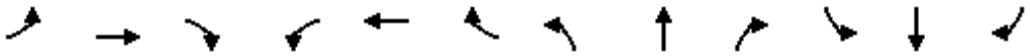
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

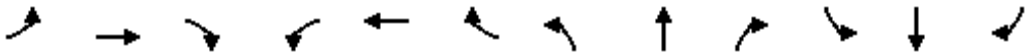
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



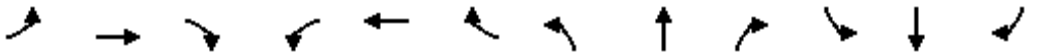
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.95			0.91			1.00	
Frt		1.00			0.96			0.99			1.00	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		3496			3381			5003			0	
Flt Permitted		0.71			1.00			1.00			1.00	
Satd. Flow (perm)		2515			3381			5003			0	
Volume (vph)	20	63	0	0	768	325	36	1091	122	0	2	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	68	0	0	835	353	39	1186	133	0	2	0
RTOR Reduction (vph)	0	0	0	0	40	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	90	0	0	1148	0	0	1341	0	0	2	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		29.0			29.0			41.6			0.0	
Effective Green, g (s)		29.5			29.5			42.5			0.0	
Actuated g/C Ratio		0.37			0.37			0.53			0.00	
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		927			1247			2658			0	
v/s Ratio Prot					c0.34							
v/s Ratio Perm		0.04						0.27				
v/c Ratio		0.10			0.92			0.50			no cap	
Uniform Delay, d1		16.5			24.1			12.0			Error	
Progression Factor		0.36			1.00			1.00				
Incremental Delay, d2		0.0			11.0			0.7			Error	
Delay (s)		6.0			35.1			12.7			Error	
Level of Service		A			D			B			F	
Approach Delay (s)		6.0			35.1			12.7			Error	
Approach LOS		A			D			B			F	

Intersection Summary			
HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



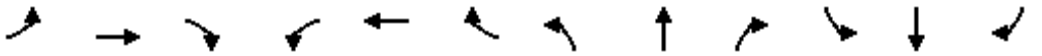
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3454		1770	3492		1770	3351		1770	3447	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3454		1770	3492		1770	3351		1770	3447	
Volume (vph)	50	782	150	149	1019	99	174	345	189	150	530	111
Peak-hour factor, PHF	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	68	1057	203	201	1377	134	235	466	255	203	716	150
RTOR Reduction (vph)	0	16	0	0	7	0	0	74	0	0	17	0
Lane Group Flow (vph)	68	1244	0	201	1504	0	235	647	0	203	849	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.2	33.3		13.5	39.6		9.3	27.0		9.3	27.0	
Effective Green, g (s)	7.2	34.6		13.5	40.9		8.3	27.6		8.3	27.6	
Actuated g/C Ratio	0.07	0.35		0.14	0.41		0.08	0.28		0.08	0.28	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	127	1195		239	1428		147	925		147	951	
v/s Ratio Prot	0.04	c0.36		0.11	c0.43		c0.13	0.19		0.11	c0.25	
v/s Ratio Perm												
v/c Ratio	0.54	1.04		0.84	1.05		1.60	0.70		1.38	0.89	
Uniform Delay, d1	44.8	32.7		42.2	29.6		45.9	32.5		45.9	34.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	37.3		21.8	39.3		298.9	4.4		208.0	12.5	
Delay (s)	47.0	70.0		64.0	68.9		344.7	36.9		253.9	47.2	
Level of Service	D	E		E	E		F	D		F	D	
Approach Delay (s)		68.8			68.3			112.5			86.5	
Approach LOS		E			E			F			F	

Intersection Summary			
HCM Average Control Delay	80.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3491		1770	3492		1770	3442		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3491		1770	3492		1770	3442		1770	1863	1583
Volume (vph)	147	755	76	100	1033	101	100	333	75	264	479	365
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	173	888	89	118	1215	119	118	392	88	311	564	429
RTOR Reduction (vph)	0	7	0	0	7	0	0	19	0	0	0	135
Lane Group Flow (vph)	173	970	0	118	1327	0	118	461	0	311	564	294
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	10.7	32.8		10.7	32.8		10.2	27.0		11.3	28.1	28.1
Effective Green, g (s)	10.7	34.1		10.7	34.1		10.2	27.9		11.3	29.0	29.0
Actuated g/C Ratio	0.11	0.34		0.11	0.34		0.10	0.28		0.11	0.29	0.29
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	4.9
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.0
Lane Grp Cap (vph)	189	1190		189	1191		181	960		200	540	459
v/s Ratio Prot	0.10	c0.28		0.07	c0.38		0.07	0.13		c0.18	c0.30	
v/s Ratio Perm												0.19
v/c Ratio	0.92	0.81		0.62	1.11		0.65	0.48		1.55	1.04	0.64
Uniform Delay, d1	44.2	30.1		42.7	33.0		43.2	30.0		44.4	35.5	31.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	42.0	6.2		6.3	63.3		8.1	0.1		272.8	50.8	2.3
Delay (s)	86.2	36.3		49.0	96.2		51.3	30.1		317.2	86.3	33.2
Level of Service	F	D		D	F		D	C		F	F	C
Approach Delay (s)		43.8			92.4			34.3			123.9	
Approach LOS		D			F			C			F	

Intersection Summary			
HCM Average Control Delay	81.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3508		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.31	1.00		0.67	1.00	1.00	0.69	1.00	1.00
Satd. Flow (perm)	466	3539	1583	577	3508		1247	1863	1583	1287	3539	1583
Volume (vph)	11	644	201	157	993	62	212	89	103	100	113	13
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	740	231	180	1141	71	244	102	118	115	130	15
RTOR Reduction (vph)	0	0	139	0	11	0	0	0	56	0	0	9
Lane Group Flow (vph)	13	740	92	180	1201	0	244	102	62	115	130	6
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	231	1403		499	745	633	515	1416	633
v/s Ratio Prot		0.21			c0.34			0.05			0.04	
v/s Ratio Perm	0.03		0.06	0.31			c0.20		0.04	0.09		0.00
v/c Ratio	0.07	0.52	0.15	0.78	0.86		0.49	0.14	0.10	0.22	0.09	0.01
Uniform Delay, d1	7.4	9.1	7.6	10.5	10.9		9.0	7.6	7.5	7.9	7.5	7.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.94	1.97	3.15	1.00	1.00	1.00
Incremental Delay, d2	0.7	1.4	0.5	22.4	6.9		2.7	0.3	0.2	1.0	0.1	0.0
Delay (s)	8.1	10.5	8.1	32.9	17.8		20.0	15.3	23.8	8.9	7.6	7.3
Level of Service	A	B	A	C	B		C	B	C	A	A	A
Approach Delay (s)		9.9			19.8			19.9			8.2	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3469		1770	1863	1583	1770	3417	
Flt Permitted	0.20	1.00	1.00	0.31	1.00		0.23	1.00	1.00	0.19	1.00	
Satd. Flow (perm)	378	1863	1583	574	3469		421	1863	1583	362	3417	
Volume (vph)	94	306	77	115	507	78	87	503	104	74	517	155
Peak-hour factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Adj. Flow (vph)	134	437	110	164	724	111	124	719	149	106	739	221
RTOR Reduction (vph)	0	0	47	0	21	0	0	0	73	0	43	0
Lane Group Flow (vph)	134	437	63	164	814	0	124	719	76	106	917	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	21.3	21.3	21.3	21.3	21.3		30.7	30.7	30.7	30.7	30.7	
Effective Green, g (s)	21.3	21.3	21.3	21.3	21.3		30.7	30.7	30.7	30.7	30.7	
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36		0.51	0.51	0.51	0.51	0.51	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	134	661	562	204	1231		215	953	810	185	1748	
v/s Ratio Prot		0.23			0.23			c0.39			0.27	
v/s Ratio Perm	c0.35		0.04	0.29			0.29		0.05	0.29		
v/c Ratio	1.00	0.66	0.11	0.80	0.66		0.58	0.75	0.09	0.57	0.52	
Uniform Delay, d1	19.4	16.3	13.0	17.5	16.3		10.1	11.7	7.5	10.1	9.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	77.7	2.5	0.1	20.0	1.3		10.8	5.5	0.2	12.3	1.1	
Delay (s)	97.1	18.8	13.1	37.5	17.7		20.9	17.2	7.7	22.4	10.9	
Level of Service	F	B	B	D	B		C	B	A	C	B	
Approach Delay (s)		33.3			20.9			16.2			12.0	
Approach LOS		C			C			B			B	

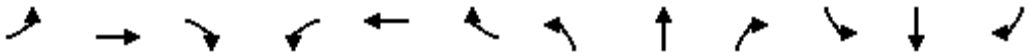
Intersection Summary			
HCM Average Control Delay	19.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3435			3490						5046	
Flt Permitted		1.00			0.62						1.00	
Satd. Flow (perm)		3435			2206						5046	
Volume (vph)	0	408	100	178	457	0	0	0	0	50	1887	88
Peak-hour factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	453	111	193	497	0	0	0	0	54	2051	96
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	557	0	0	690	0	0	0	0	0	2194	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		34.6			34.6						46.0	
Effective Green, g (s)		35.1			35.1						46.9	
Actuated g/C Ratio		0.39			0.39						0.52	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1340			860						2630	
v/s Ratio Prot		0.16										
v/s Ratio Perm					c0.31						0.43	
v/c Ratio		0.42			0.89dl						0.83	
Uniform Delay, d1		20.0			24.4						18.3	
Progression Factor		1.00			0.39						1.00	
Incremental Delay, d2		0.1			4.4						3.3	
Delay (s)		20.1			13.9						21.6	
Level of Service		C			B						C	
Approach Delay (s)		20.1			13.9			0.0			21.6	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

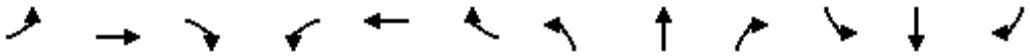
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1857		1770	1791		1770	1824	
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.68	1.00		0.68	1.00	
Satd. Flow (perm)	466	1863	1583	466	1857		1264	1791		1265	1824	
Volume (vph)	39	526	13	75	661	13	13	75	26	24	87	14
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	47	634	16	90	796	16	16	90	31	29	105	17
RTOR Reduction (vph)	0	0	10	0	2	0	0	19	0	0	10	0
Lane Group Flow (vph)	47	634	6	90	810	0	16	102	0	29	112	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	186	745	633	186	743		506	716		506	730	
v/s Ratio Prot		0.34			c0.44			0.06			c0.06	
v/s Ratio Perm	0.10		0.00	0.19			0.01			0.02		
v/c Ratio	0.25	0.85	0.01	0.48	1.09		0.03	0.14		0.06	0.15	
Uniform Delay, d1	8.0	10.9	7.2	8.9	12.0		7.3	7.6		7.4	7.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.2	11.7	0.0	8.7	60.4		0.1	0.4		0.2	0.4	
Delay (s)	11.3	22.7	7.3	17.7	72.4		7.4	8.1		7.6	8.1	
Level of Service	B	C	A	B	E		A	A		A	A	
Approach Delay (s)		21.5			66.9			8.0			8.0	
Approach LOS		C			E			A			A	

Intersection Summary			
HCM Average Control Delay	41.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



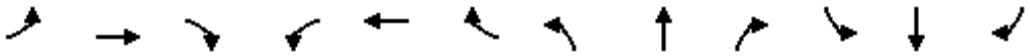
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1815		1770	1827		1770	1817		1770	1826	
Flt Permitted	0.22	1.00		0.22	1.00		0.51	1.00		0.47	1.00	
Satd. Flow (perm)	414	1815		414	1827		958	1817		883	1826	
Volume (vph)	37	362	74	39	410	60	75	276	55	74	252	38
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	45	436	89	47	494	72	90	333	66	89	304	46
RTOR Reduction (vph)	0	12	0	0	8	0	0	12	0	0	9	0
Lane Group Flow (vph)	45	513	0	47	558	0	90	387	0	89	341	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	18.0	18.0		17.0	17.0		34.0	34.0		33.5	33.5	
Effective Green, g (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.57	0.57		0.57	0.57	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	124	545		124	548		543	1030		500	1035	
v/s Ratio Prot		0.28			c0.31			c0.21			0.19	
v/s Ratio Perm	0.11			0.11			0.09			0.10		
v/c Ratio	0.36	0.94		0.38	1.02		0.17	0.38		0.18	0.33	
Uniform Delay, d1	16.5	20.5		16.6	21.0		6.2	7.2		6.3	6.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	24.8		1.9	42.9		0.7	1.0		0.8	0.9	
Delay (s)	18.3	45.2		18.5	63.9		6.9	8.2		7.0	7.8	
Level of Service	B	D		B	E		A	A		A	A	
Approach Delay (s)		43.1			60.4			8.0			7.6	
Approach LOS		D			E			A			A	

Intersection Summary			
HCM Average Control Delay	32.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1812		1770	1802		1770	1863	1583	1770	1843	
Flt Permitted	0.36	1.00		0.56	1.00		0.26	1.00	1.00	0.35	1.00	
Satd. Flow (perm)	670	1812		1039	1802		483	1863	1583	648	1843	
Volume (vph)	12	220	49	164	336	93	76	439	150	100	479	37
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	239	53	178	365	101	83	477	163	109	521	40
RTOR Reduction (vph)	0	20	0	0	25	0	0	0	98	0	7	0
Lane Group Flow (vph)	13	272	0	178	441	0	83	477	65	109	554	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	268	725		416	721		193	745	633	259	737	
v/s Ratio Prot		0.15			c0.24			0.26			c0.30	
v/s Ratio Perm	0.02			0.17			0.17		0.04	0.17		
v/c Ratio	0.05	0.38		0.43	0.61		0.43	0.64	0.10	0.42	0.75	
Uniform Delay, d1	7.3	8.5		8.7	9.5		8.7	9.7	7.5	8.7	10.3	
Progression Factor	1.00	1.00		1.00	1.00		1.22	1.26	2.99	1.00	1.03	
Incremental Delay, d2	0.3	1.5		3.2	3.8		6.3	3.9	0.3	4.8	6.7	
Delay (s)	7.7	10.0		11.9	13.4		16.9	16.1	22.7	13.4	17.3	
Level of Service	A	A		B	B		B	B	C	B	B	
Approach Delay (s)		9.9			13.0			17.7			16.7	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



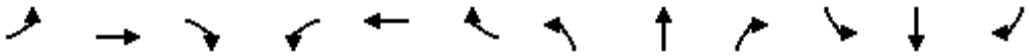
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1817		1770	1783		1770	3467		1770	3437	
Flt Permitted	0.35	1.00		0.61	1.00		0.33	1.00		0.40	1.00	
Satd. Flow (perm)	646	1817		1131	1783		606	3467		751	3437	
Volume (vph)	74	188	37	87	315	125	99	468	74	101	530	126
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	204	40	95	342	136	108	509	80	110	576	137
RTOR Reduction (vph)	0	17	0	0	36	0	0	31	0	0	52	0
Lane Group Flow (vph)	80	227	0	95	442	0	108	558	0	110	661	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	258	727		452	713		242	1387		300	1375	
v/s Ratio Prot		0.12			c0.25			0.16			c0.19	
v/s Ratio Perm	0.12			0.08			0.18			0.15		
v/c Ratio	0.31	0.31		0.21	0.62		0.45	0.40		0.37	0.48	
Uniform Delay, d1	8.2	8.2		7.9	9.6		8.8	8.6		8.4	8.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.1	1.1		1.1	4.0		5.9	0.9		3.4	1.2	
Delay (s)	11.3	9.3		8.9	13.6		14.6	9.5		11.9	10.1	
Level of Service	B	A		A	B		B	A		B	B	
Approach Delay (s)		9.8			12.8			10.3			10.4	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

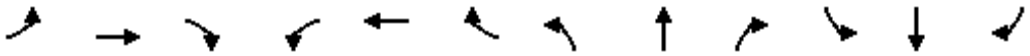
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3405			3503						5024	
Flt Permitted		1.00			0.65						1.00	
Satd. Flow (perm)		3405			2306						5024	
Volume (vph)	0	331	112	76	289	0	0	0	0	36	1690	138
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	360	122	83	314	0	0	0	0	39	1837	150
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	462	0	0	397	0	0	0	0	0	2016	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		20.4			20.4						59.7	
Effective Green, g (s)		21.4			21.4						60.6	
Actuated g/C Ratio		0.24			0.24						0.67	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		810			548						3383	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.17						0.40	
v/c Ratio		0.57			0.72						0.60	
Uniform Delay, d1		30.2			31.6						8.0	
Progression Factor		1.00			0.35						1.00	
Incremental Delay, d2		0.6			3.6						0.5	
Delay (s)		30.9			14.6						8.6	
Level of Service		C			B						A	
Approach Delay (s)		30.9			14.6			0.0			8.6	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

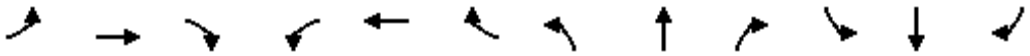
Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1751		1770	1810		1770	3486		1770	3518	
Flt Permitted	0.62	1.00		0.57	1.00		0.32	1.00		0.35	1.00	
Satd. Flow (perm)	1157	1751		1070	1810		600	3486		647	3518	
Volume (vph)	62	152	101	101	162	37	89	553	62	13	628	26
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	68	167	111	111	178	41	98	608	68	14	690	29
RTOR Reduction (vph)	0	60	0	0	21	0	0	21	0	0	7	0
Lane Group Flow (vph)	68	218	0	111	198	0	98	655	0	14	712	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	463	700		428	724		240	1394		259	1407	
v/s Ratio Prot		c0.12			0.11			0.19			c0.20	
v/s Ratio Perm	0.06			0.10			0.16			0.02		
v/c Ratio	0.15	0.31		0.26	0.27		0.41	0.47		0.05	0.51	
Uniform Delay, d1	7.6	8.2		8.0	8.1		8.6	8.9		7.4	9.0	
Progression Factor	1.00	1.00		1.00	1.00		0.91	0.92		0.83	0.93	
Incremental Delay, d2	0.7	1.2		1.5	0.9		4.6	1.0		0.3	1.0	
Delay (s)	8.3	9.4		9.5	9.0		12.5	9.1		6.4	9.4	
Level of Service	A	A		A	A		B	A		A	A	
Approach Delay (s)		9.2			9.2			9.6			9.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

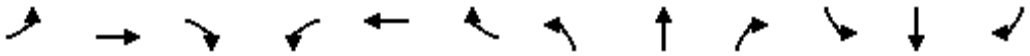


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3419		1770	1831		1770	1768	
Flt Permitted	0.35	1.00	1.00	0.55	1.00		0.36	1.00		0.43	1.00	
Satd. Flow (perm)	657	1863	1583	1018	3419		668	1831		798	1768	
Volume (vph)	126	190	62	64	351	102	74	377	49	75	340	174
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	142	213	70	72	394	115	83	424	55	84	382	196
RTOR Reduction (vph)	0	0	52	0	54	0	0	6	0	0	24	0
Lane Group Flow (vph)	142	213	18	72	455	0	83	473	0	84	554	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	15.6	15.6	15.6	15.6	15.6		36.4	36.4		36.4	36.4	
Effective Green, g (s)	15.6	15.6	15.6	15.6	15.6		36.4	36.4		36.4	36.4	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26		0.61	0.61		0.61	0.61	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	171	484	412	265	889		405	1111		484	1073	
v/s Ratio Prot		0.11			0.13			0.26			c0.31	
v/s Ratio Perm	c0.22		0.01	0.07			0.12			0.11		
v/c Ratio	0.83	0.44	0.04	0.27	0.51		0.20	0.43		0.17	0.52	
Uniform Delay, d1	21.0	18.6	16.6	17.7	18.9		5.3	6.3		5.2	6.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.6	0.6	0.0	0.6	0.5		1.1	1.2		0.8	1.8	
Delay (s)	48.5	19.2	16.7	18.2	19.4		6.4	7.5		6.0	8.5	
Level of Service	D	B	B	B	B		A	A		A	A	
Approach Delay (s)		28.6			19.3			7.3			8.2	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.96			1.00						1.00	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3409			3495						5059	
Flt Permitted		1.00			0.66						1.00	
Satd. Flow (perm)		3409			2328						5059	
Volume (vph)	0	302	98	148	433	0	0	0	0	30	1939	61
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	328	107	161	471	0	0	0	0	33	2108	66
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	426	0	0	632	0	0	0	0	0	2203	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		22.1			22.1						57.0	
Effective Green, g (s)		24.1			24.1						57.9	
Actuated g/C Ratio		0.27			0.27						0.64	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		913			623						3255	
v/s Ratio Prot		0.13										
v/s Ratio Perm					c0.27						0.44	
v/c Ratio		0.47			1.01						0.68	
Uniform Delay, d1		27.6			33.0						10.1	
Progression Factor		1.00			0.41						0.42	
Incremental Delay, d2		0.1			34.9						1.0	
Delay (s)		27.7			48.5						5.2	
Level of Service		C			D						A	
Approach Delay (s)		27.7			48.5			0.0			5.2	
Approach LOS		C			D			A			A	

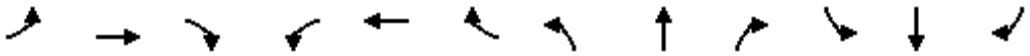
Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	69	251	0	0	365	37	119	138	12	26	0	63
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	86	314	0	0	456	46	149	172	15	32	0	79

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	400	503	149	188	111
Volume Left (vph)	86	0	149	0	33
Volume Right (vph)	0	46	0	15	79
Hadj (s)	0.08	-0.02	0.53	-0.02	-0.33
Departure Headway (s)	6.7	6.4	8.2	7.6	7.7
Degree Utilization, x	0.74	0.89	0.34	0.40	0.24
Capacity (veh/h)	400	555	411	450	422
Control Delay (s)	26.4	40.7	14.2	14.4	13.1
Approach Delay (s)	26.4	40.7	14.3		13.1
Approach LOS	D	E	B		B

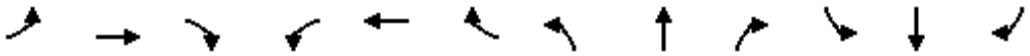
Intersection Summary				
Delay	27.6			
HCM Level of Service	D			
Intersection Capacity Utilization	65.1%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	74	188	26	26	290	87	50	315	39	87	277	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	80	204	28	28	315	95	54	342	42	95	301	95

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	313	438	439	490
Volume Left (vph)	80	28	54	95
Volume Right (vph)	28	95	42	95
Hadj (s)	0.03	-0.08	0.00	-0.04
Departure Headway (s)	9.6	9.1	9.1	9.1
Degree Utilization, x	0.83	1.10	1.11	1.24
Capacity (veh/h)	371	395	405	402
Control Delay (s)	46.0	105.9	110.5	155.0
Approach Delay (s)	46.0	105.9	110.5	155.0
Approach LOS	E	F	F	F

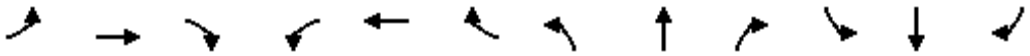
Intersection Summary			
Delay	110.2		
HCM Level of Service	F		
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1832		1770	1863	1583	1770	3480		1770	3494	
Flt Permitted	0.60	1.00		0.61	1.00	1.00	0.25	1.00		0.31	1.00	
Satd. Flow (perm)	1114	1832		1131	1863	1583	466	3480		579	3494	
Volume (vph)	62	200	25	63	238	62	38	603	76	26	804	75
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	217	27	68	259	67	41	655	83	28	874	82
RTOR Reduction (vph)	0	11	0	0	0	40	0	25	0	0	17	0
Lane Group Flow (vph)	67	233	0	68	259	27	41	713	0	28	939	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	446	733		452	745	633	186	1392		232	1398	
v/s Ratio Prot		0.13			c0.14			0.21			c0.27	
v/s Ratio Perm	0.06			0.06		0.02	0.09			0.05		
v/c Ratio	0.15	0.32		0.15	0.35	0.04	0.22	0.51		0.12	0.67	
Uniform Delay, d1	7.7	8.2		7.7	8.4	7.3	7.9	9.1		7.6	9.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.81	0.94	
Incremental Delay, d2	0.7	1.1		0.7	1.3	0.1	2.7	1.4		1.0	2.4	
Delay (s)	8.4	9.4		8.4	9.6	7.4	10.6	10.4		7.1	11.6	
Level of Service	A	A		A	A	A	B	B		A	B	
Approach Delay (s)		9.2			9.1			10.4			11.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

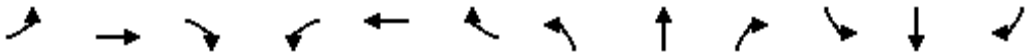


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.90			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3194			3434						5064	
Flt Permitted		1.00			0.67						1.00	
Satd. Flow (perm)		3194			2373						5064	
Volume (vph)	0	87	163	466	301	2	0	0	0	34	2115	49
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	95	177	507	327	2	0	0	0	37	2299	53
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	270	0	0	836	0	0	0	0	0	2386	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		28.6			28.6						42.0	
Effective Green, g (s)		29.1			29.1						42.9	
Actuated g/C Ratio		0.36			0.36						0.54	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1162			863						2716	
v/s Ratio Prot		0.08										
v/s Ratio Perm					c0.35						0.47	
v/c Ratio		0.23			1.31dl						0.88	
Uniform Delay, d1		17.7			25.0						16.3	
Progression Factor		1.00			0.31						1.00	
Incremental Delay, d2		0.0			12.2						4.4	
Delay (s)		17.7			19.9						20.7	
Level of Service		B			B						C	
Approach Delay (s)		17.7			19.9			0.0			20.7	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

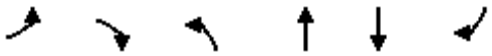
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	176	0	0	317	12	767	190	107	0	0	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	16	215	0	0	387	15	935	232	130	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	230	401	624	674
Volume Left (vph)	16	0	624	312
Volume Right (vph)	0	15	0	130
Hadj (s)	0.05	0.01	0.53	0.13
Departure Headway (s)	6.7	6.3	7.0	6.6
Degree Utilization, x	0.43	0.70	1.22	1.24
Capacity (veh/h)	528	564	519	552
Control Delay (s)	14.6	22.8	137.1	143.7
Approach Delay (s)	14.6	22.8	140.5	
Approach LOS	B	C	F	

Intersection Summary				
Delay		101.0		
HCM Level of Service		F		
Intersection Capacity Utilization		56.1%	ICU Level of Service	B
Analysis Period (min)		15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4842	
Flt Permitted					1.00	
Satd. Flow (perm)					4842	
Volume (vph)	0	0	0	0	1863	870
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2025	946
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2971	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4842	
v/s Ratio Prot					c0.61	
v/s Ratio Perm						
v/c Ratio					0.61	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.6	
Delay (s)					0.6	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.6	
Approach LOS	A			A	A	

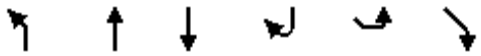
Intersection Summary			
HCM Average Control Delay	0.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.96			
Flt Protected			1.00			
Satd. Flow (prot)			4882			
Flt Permitted			1.00			
Satd. Flow (perm)			4882			
Volume (vph)	0	0	1384	503	0	0
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	0	1521	553	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2074	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4882			
v/s Ratio Prot			c0.42			
v/s Ratio Perm						
v/c Ratio			0.42			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.3			
Delay (s)			0.3			
Level of Service			A			
Approach Delay (s)	0.0		0.3		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



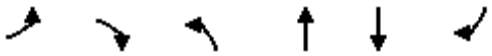
Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary					
Delay		0.0			
HCM Level of Service		A			
Intersection Capacity Utilization		0.0%	ICU Level of Service		A
Analysis Period (min)		15			

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

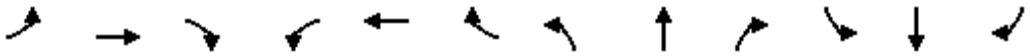


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

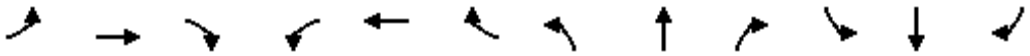


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3513		3433	3539	1583	1770	5005	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3513		3433	3539	1583	1770	5005	
Volume (vph)	263	579	176	427	967	51	263	656	188	188	1499	176
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	286	629	191	464	1051	55	286	713	204	204	1629	191
RTOR Reduction (vph)	0	0	132	0	4	0	0	0	141	0	13	0
Lane Group Flow (vph)	286	629	59	464	1103	0	286	713	63	204	1807	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	12.5	31.0	31.0	13.5	32.0		12.5	32.5	32.5	13.5	33.5	
Effective Green, g (s)	13.5	32.0	32.0	14.5	33.0		12.5	34.0	34.0	13.5	35.0	
Actuated g/C Ratio	0.12	0.29	0.29	0.13	0.30		0.11	0.31	0.31	0.12	0.32	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	421	1030	461	453	1054		390	1094	489	217	1593	
v/s Ratio Prot	0.08	0.18		c0.14	c0.31		c0.08	0.20		0.12	c0.36	
v/s Ratio Perm			0.04						0.04			
v/c Ratio	0.68	0.61	0.13	1.02	1.05		0.73	0.65	0.13	0.94	1.13	
Uniform Delay, d1	46.2	33.6	28.7	47.8	38.5		47.1	32.9	27.3	47.8	37.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.9	0.9	0.1	48.6	40.5		6.6	3.0	0.5	44.4	68.8	
Delay (s)	50.1	34.6	28.8	96.4	79.0		53.7	35.9	27.9	92.3	106.3	
Level of Service	D	C	C	F	E		D	D	C	F	F	
Approach Delay (s)		37.6			84.2			38.8			104.9	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM Average Control Delay	73.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

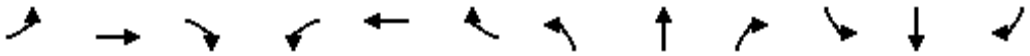
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			0.98				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3518			3501			4966				
Flt Permitted		0.76			1.00			1.00				
Satd. Flow (perm)		2704			3501			4966				
Volume (vph)	50	357	0	0	635	50	101	1157	195	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	388	0	0	690	54	110	1258	212	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	442	0	0	739	0	0	1551	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		34.6			34.6			46.0				
Effective Green, g (s)		35.1			35.1			46.9				
Actuated g/C Ratio		0.39			0.39			0.52				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		1055			1365			2588				
v/s Ratio Prot					c0.21							
v/s Ratio Perm		0.16						0.31				
v/c Ratio		0.42			0.54			0.60				
Uniform Delay, d1		20.0			21.2			15.0				
Progression Factor		0.27			1.00			1.19				
Incremental Delay, d2		0.1			0.2			1.0				
Delay (s)		5.4			21.5			18.9				
Level of Service		A			C			B				
Approach Delay (s)		5.4			21.5			18.9			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



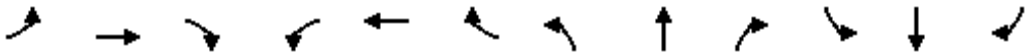
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.99			1.00				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3479			3490			5051				
Flt Permitted		0.62			1.00			1.00				
Satd. Flow (perm)		2182			3490			5051				
Volume (vph)	125	238	0	0	365	38	94	1157	26	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	259	0	0	397	41	102	1258	28	0	0	0
RTOR Reduction (vph)	0	0	0	0	8	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	395	0	0	430	0	0	1386	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.4			20.4			59.7				
Effective Green, g (s)		21.4			21.4			60.6				
Actuated g/C Ratio		0.24			0.24			0.67				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		519			830			3401				
v/s Ratio Prot					0.12							
v/s Ratio Perm		c0.18						0.27				
v/c Ratio		0.76			0.52			0.41				
Uniform Delay, d1		31.9			29.8			6.6				
Progression Factor		0.31			1.00			0.67				
Incremental Delay, d2		4.9			0.2			0.3				
Delay (s)		14.7			30.0			4.8				
Level of Service		B			C			A				
Approach Delay (s)		14.7			30.0			4.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



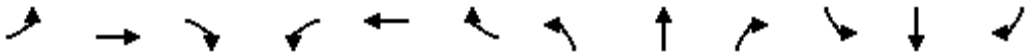
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.97			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3498			3425			5033				
Flt Permitted		0.59			1.00			1.00				
Satd. Flow (perm)		2073			3425			5033				
Volume (vph)	75	242	0	0	467	128	112	1386	70	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	82	263	0	0	508	139	122	1507	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	28	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	345	0	0	619	0	0	1699	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		22.1			22.1			57.0				
Effective Green, g (s)		24.1			24.1			57.9				
Actuated g/C Ratio		0.27			0.27			0.64				
Clearance Time (s)		6.0			6.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		555			917			3238				
v/s Ratio Prot					c0.18							
v/s Ratio Perm		0.17						0.34				
v/c Ratio		0.62			0.68			0.52				
Uniform Delay, d1		28.9			29.5			8.6				
Progression Factor		0.23			1.00			1.00				
Incremental Delay, d2		1.4			1.6			0.6				
Delay (s)		8.1			31.0			9.3				
Level of Service		A			C			A				
Approach Delay (s)		8.1			31.0			9.3			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	628	0	301	0	0	0	0	1257	454	754	1108	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	706	0	338	0	0	0	0	1412	510	847	1245	0
RTOR Reduction (vph)	0	0	73	0	0	0	0	0	319	0	0	0
Lane Group Flow (vph)	706	0	265	0	0	0	0	1412	191	847	1245	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	17.0		17.0					23.0	23.0	26.0	53.5	
Effective Green, g (s)	18.0		18.0					23.5	23.5	26.5	54.0	
Actuated g/C Ratio	0.22		0.22					0.29	0.29	0.33	0.68	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	772		356					1494	465	586	3432	
v/s Ratio Prot								c0.28		c0.48	0.24	
v/s Ratio Perm	c0.21		0.17						0.12			
v/c Ratio	0.91		0.74					0.95	0.41	1.45	0.36	
Uniform Delay, d1	30.2		28.9					27.6	22.7	26.8	5.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	15.3		8.2					13.4	2.7	209.9	0.3	
Delay (s)	45.5		37.1					41.1	25.4	236.7	5.9	
Level of Service	D		D					D	C	F	A	
Approach Delay (s)		42.8			0.0			36.9			99.3	
Approach LOS		D			A			D			F	

Intersection Summary			
HCM Average Control Delay	63.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

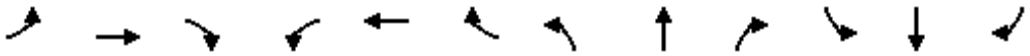
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

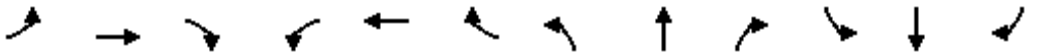
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3494		1770	3488		1770	3383		1770	3405	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3494		1770	3488		1770	3383		1770	3405	
Volume (vph)	150	1485	138	114	1158	125	162	483	202	126	332	113
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	197	1949	181	150	1520	164	213	634	265	165	436	148
RTOR Reduction (vph)	0	6	0	0	8	0	0	42	0	0	31	0
Lane Group Flow (vph)	197	2124	0	150	1676	0	213	857	0	165	553	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	14.5	46.6		12.5	44.6		8.7	25.3		8.7	25.3	
Effective Green, g (s)	14.5	47.9		12.5	45.9		7.7	25.9		7.7	25.9	
Actuated g/C Ratio	0.13	0.44		0.11	0.42		0.07	0.24		0.07	0.24	
Clearance Time (s)	4.0	5.3		4.0	5.3		3.0	4.6		3.0	4.6	
Vehicle Extension (s)	2.0	2.5		2.0	2.5		2.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	233	1521		201	1455		124	797		124	802	
v/s Ratio Prot	c0.11	c0.61		0.08	0.48		c0.12	c0.25		0.09	0.16	
v/s Ratio Perm												
v/c Ratio	0.85	1.40		0.75	1.15		1.72	1.08		1.33	0.69	
Uniform Delay, d1	46.7	31.1		47.2	32.0		51.1	42.0		51.1	38.4	
Progression Factor	1.00	1.00		1.06	0.77		1.00	1.00		1.00	1.00	
Incremental Delay, d2	22.7	182.4		1.2	69.3		354.6	54.1		193.7	2.1	
Delay (s)	69.3	213.5		51.2	93.9		405.8	96.1		244.8	40.5	
Level of Service	E	F		D	F		F	F		F	D	
Approach Delay (s)		201.3			90.4			155.4			85.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	144.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		

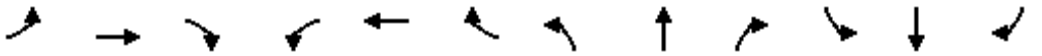
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3501		1770	3430		1770	3429		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3501		1770	3430		1770	3429		1770	1863	1583
Volume (vph)	215	1135	89	114	1069	276	138	476	125	262	373	251
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	282	1490	117	150	1403	362	181	625	164	344	490	329
RTOR Reduction (vph)	0	5	0	0	21	0	0	22	0	0	0	110
Lane Group Flow (vph)	282	1602	0	150	1744	0	181	767	0	344	490	219
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												6
Actuated Green, G (s)	11.4	44.5		10.5	43.6		6.7	30.1		6.7	30.1	43.6
Effective Green, g (s)	11.4	45.8		10.5	44.9		6.7	31.0		6.7	31.0	44.9
Actuated g/C Ratio	0.10	0.42		0.10	0.41		0.06	0.28		0.06	0.28	0.41
Clearance Time (s)	4.0	5.3		4.0	5.3		4.0	4.9		4.0	4.9	5.3
Vehicle Extension (s)	3.0	2.5		3.0	2.5		3.0	2.0		3.0	2.0	2.5
Lane Grp Cap (vph)	183	1458		169	1400		108	966		108	525	646
v/s Ratio Prot	c0.16	0.46		0.08	c0.51		0.10	0.22		c0.19	c0.26	
v/s Ratio Perm												0.14
v/c Ratio	1.54	1.10		0.89	1.25		1.68	0.79		3.19	0.93	0.34
Uniform Delay, d1	49.3	32.1		49.2	32.5		51.6	36.6		51.6	38.5	22.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	268.8	55.4		38.6	116.8		341.0	4.3		1007.1	23.5	1.4
Delay (s)	318.1	87.5		87.7	149.4		392.7	40.8		1058.7	62.0	23.8
Level of Service	F	F		F	F		F	D		F	E	C
Approach Delay (s)		121.9			144.6			106.5			346.0	
Approach LOS		F			F			F			F	

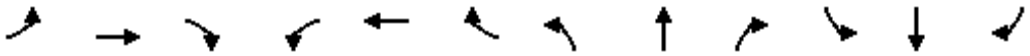
Intersection Summary			
HCM Average Control Delay	170.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	116.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3477		1770	1863	1583	1770	3539	1583
Flt Permitted	0.25	1.00	1.00	0.25	1.00		0.66	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	466	3539	1583	466	3477		1224	1863	1583	1122	3539	1583
Volume (vph)	36	1410	239	91	946	125	326	189	220	151	112	24
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	48	1890	320	122	1268	168	437	253	295	202	150	32
RTOR Reduction (vph)	0	0	192	0	26	0	0	0	1	0	0	8
Lane Group Flow (vph)	48	1890	128	122	1410	0	437	253	294	202	150	24
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40		0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	186	1416	633	186	1391		490	745	633	449	1416	633
v/s Ratio Prot		c0.53			0.41			0.14			0.04	
v/s Ratio Perm	0.10		0.08	0.26			c0.36		0.19	0.18		0.01
v/c Ratio	0.26	1.33	0.20	0.66	1.01		0.89	0.34	0.47	0.45	0.11	0.04
Uniform Delay, d1	8.0	12.0	7.8	9.8	12.0		11.2	8.3	8.8	8.8	7.5	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.45	0.49	0.47	1.00	1.00	1.00
Incremental Delay, d2	3.3	155.5	0.7	16.7	27.6		2.6	0.1	0.2	3.2	0.2	0.1
Delay (s)	11.4	167.5	8.6	26.4	39.6		7.6	4.2	4.3	12.0	7.7	7.4
Level of Service	B	F	A	C	D		A	A	A	B	A	A
Approach Delay (s)		141.7			38.6			5.7			9.9	
Approach LOS		F			D			A			A	

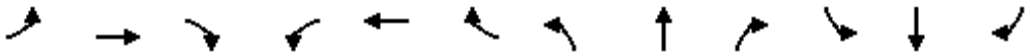
Intersection Summary			
HCM Average Control Delay	75.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	3475		1770	1863	1583	1770	3479	
Flt Permitted	0.37	1.00	1.00	0.17	1.00		0.35	1.00	1.00	0.14	1.00	
Satd. Flow (perm)	695	1863	1583	324	3475		643	1863	1583	257	3479	
Volume (vph)	117	489	102	52	358	49	51	540	78	49	428	55
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	164	685	143	73	501	69	71	756	109	69	599	77
RTOR Reduction (vph)	0	0	38	0	18	0	0	0	53	0	17	0
Lane Group Flow (vph)	164	685	105	73	552	0	71	756	56	69	659	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Effective Green, g (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38		0.48	0.48	0.48	0.48	0.48	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	266	714	607	124	1332		311	900	765	124	1682	
v/s Ratio Prot		c0.37			0.16			c0.41			0.19	
v/s Ratio Perm	0.24		0.07	0.23			0.11		0.04	0.27		
v/c Ratio	0.62	0.96	0.17	0.59	0.41		0.23	0.84	0.07	0.56	0.39	
Uniform Delay, d1	14.9	18.0	12.2	14.7	13.6		9.0	13.5	8.3	11.0	9.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.2	23.8	0.1	7.0	0.2		1.7	9.3	0.2	16.8	0.7	
Delay (s)	19.1	41.8	12.4	21.7	13.8		10.7	22.8	8.5	27.8	10.6	
Level of Service	B	D	B	C	B		B	C	A	C	B	
Approach Delay (s)		33.8			14.7			20.2			12.2	
Approach LOS		C			B			C			B	

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		3440			3482						5028	
Flt Permitted		1.00			0.55						1.00	
Satd. Flow (perm)		3440			1929						5028	
Volume (vph)	0	522	120	181	371	0	0	0	0	75	1334	88
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	715	164	248	508	0	0	0	0	103	1827	121
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	868	0	0	756	0	0	0	0	0	2043	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		28.1			28.1						52.5	
Effective Green, g (s)		28.6			28.6						53.4	
Actuated g/C Ratio		0.32			0.32						0.59	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1093			613						2983	
v/s Ratio Prot		0.25										
v/s Ratio Perm					c0.39						0.41	
v/c Ratio		0.79			2.99dl						0.68	
Uniform Delay, d1		28.0			30.7						12.5	
Progression Factor		1.00			0.32						1.00	
Incremental Delay, d2		3.8			112.0						1.3	
Delay (s)		31.8			121.8						13.8	
Level of Service		C			F						B	
Approach Delay (s)		31.8			121.8			0.0			13.8	
Approach LOS		C			F			A			B	

Intersection Summary			
HCM Average Control Delay	40.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

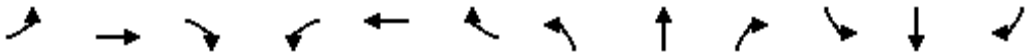
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1857		1770	1752		1770	1786	
Flt Permitted	0.20	1.00	1.00	0.20	1.00		0.68	1.00		0.60	1.00	
Satd. Flow (perm)	373	1863	1583	373	1857		1271	1752		1114	1786	
Volume (vph)	25	695	49	39	671	13	37	114	75	26	64	24
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	33	912	64	51	881	17	49	150	98	34	84	32
RTOR Reduction (vph)	0	0	40	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	33	912	24	51	897	0	49	242	0	34	110	0
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Effective Green, g (s)	20.0	20.0	20.0	20.0	20.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.60	0.60		0.60	0.60	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	107	532	452	107	531		763	1051		668	1072	
v/s Ratio Prot		c0.49			0.48			c0.14			0.06	
v/s Ratio Perm	0.09		0.02	0.14			0.04			0.03		
v/c Ratio	0.31	1.71	0.05	0.48	1.69		0.06	0.23		0.05	0.10	
Uniform Delay, d1	19.6	25.0	18.1	20.7	25.0		5.8	6.5		5.8	6.0	
Progression Factor	1.00	1.00	1.00	0.89	0.93		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	329.4	0.0	0.8	312.4		0.2	0.5		0.1	0.2	
Delay (s)	21.2	354.4	18.2	19.2	335.6		6.0	7.0		5.9	6.2	
Level of Service	C	F	B	B	F		A	A		A	A	
Approach Delay (s)		322.1			318.6			6.8			6.1	
Approach LOS		F			F			A			A	

Intersection Summary			
HCM Average Control Delay	262.1	HCM Level of Service	F
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

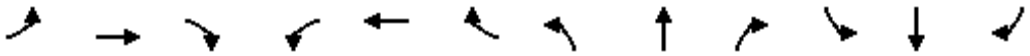
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1842		1770	1818		1770	1820		1770	1831	
Flt Permitted	0.10	1.00		0.10	1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)	186	1842		186	1818		339	1820		339	1831	
Volume (vph)	100	614	49	98	588	112	51	428	78	70	391	50
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	150	921	74	147	882	168	76	642	117	105	586	75
RTOR Reduction (vph)	0	4	0	0	10	0	0	10	0	0	7	0
Lane Group Flow (vph)	150	991	0	147	1040	0	76	749	0	105	654	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	40.0	40.0		39.0	39.0		22.0	22.0		21.5	21.5	
Effective Green, g (s)	40.0	40.0		40.0	40.0		22.0	22.0		22.0	22.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57		0.31	0.31		0.31	0.31	
Clearance Time (s)	4.0	4.0		5.0	5.0		4.0	4.0		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	1053		106	1039		107	572		107	575	
v/s Ratio Prot		0.54			0.57			c0.41			0.36	
v/s Ratio Perm	c0.81			0.79			0.22			0.31		
v/c Ratio	1.42	0.94		1.39	1.00		0.71	1.31		0.98	1.14	
Uniform Delay, d1	15.0	13.9		15.0	15.0		21.2	24.0		23.8	24.0	
Progression Factor	2.15	2.20		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	191.9	2.1		221.8	28.2		32.9	151.8		82.1	81.6	
Delay (s)	224.1	32.7		236.8	43.2		54.1	175.8		105.9	105.6	
Level of Service	F	C		F	D		D	F		F	F	
Approach Delay (s)		57.8			67.0			164.7			105.6	
Approach LOS		E			E			F			F	

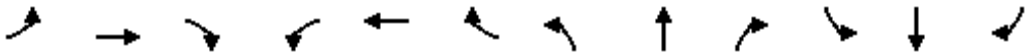
Intersection Summary			
HCM Average Control Delay	92.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.38		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



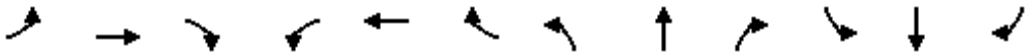
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1799		1770	1784		1770	1863	1583	1770	1850	
Flt Permitted	0.25	1.00		0.25	1.00		0.25	1.00	1.00	0.25	1.00	
Satd. Flow (perm)	466	1799		466	1784		466	1863	1583	466	1850	
Volume (vph)	25	339	100	100	319	126	38	591	175	114	515	24
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	34	464	137	137	437	173	52	809	240	156	705	33
RTOR Reduction (vph)	0	26	0	0	35	0	0	0	107	0	4	0
Lane Group Flow (vph)	34	575	0	137	575	0	52	809	133	156	734	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0	16.0	16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	186	720		186	714		186	745	633	186	740	
v/s Ratio Prot		0.32			c0.32			c0.43			0.40	
v/s Ratio Perm	0.07			0.29			0.11		0.08	0.33		
v/c Ratio	0.18	0.80		0.74	0.80		0.28	1.09	0.21	0.84	0.99	
Uniform Delay, d1	7.8	10.6		10.2	10.6		8.1	12.0	7.9	10.8	11.9	
Progression Factor	1.00	1.00		1.00	1.00		1.02	1.15	1.80	1.03	1.03	
Incremental Delay, d2	2.2	9.0		22.7	9.4		2.5	53.7	0.5	33.7	30.8	
Delay (s)	9.9	19.6		32.9	20.0		10.8	67.5	14.7	44.9	43.1	
Level of Service	A	B		C	C		B	E	B	D	D	
Approach Delay (s)		19.0			22.4			53.3			43.4	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	37.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.96		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1795		1770	1788		1770	3456		1770	3497	
Flt Permitted	0.46	1.00		0.25	1.00		0.25	1.00		0.25	1.00	
Satd. Flow (perm)	856	1795		467	1788		471	3456		466	3497	
Volume (vph)	89	315	101	87	201	74	48	544	101	74	568	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	122	431	138	119	275	101	66	745	138	101	778	68
RTOR Reduction (vph)	0	29	0	0	33	0	0	38	0	0	16	0
Lane Group Flow (vph)	122	540	0	119	343	0	66	845	0	101	830	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	342	718		187	715		188	1382		186	1399	
v/s Ratio Prot		c0.30			0.19			c0.24			0.24	
v/s Ratio Perm	0.14			0.25			0.14			0.22		
v/c Ratio	0.36	0.75		0.64	0.48		0.35	0.61		0.54	0.59	
Uniform Delay, d1	8.4	10.3		9.7	8.9		8.4	9.5		9.2	9.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.9	7.2		15.4	2.3		5.1	2.0		10.9	1.9	
Delay (s)	11.3	17.5		25.1	11.2		13.5	11.6		20.1	11.3	
Level of Service	B	B		C	B		B	B		C	B	
Approach Delay (s)		16.4			14.5			11.7			12.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

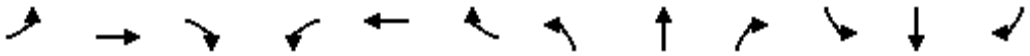


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3445			3421						5043	
Flt Permitted		1.00			0.62						1.00	
Satd. Flow (perm)		3445			2182						5043	
Volume (vph)	0	401	87	225	99	0	0	0	0	25	1387	75
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	521	113	292	129	0	0	0	0	32	1802	97
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	614	0	0	421	0	0	0	0	0	1925	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		21.1			21.1						59.0	
Effective Green, g (s)		22.1			22.1						59.9	
Actuated g/C Ratio		0.25			0.25						0.67	
Clearance Time (s)		5.0			5.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		846			536						3356	
v/s Ratio Prot		0.18										
v/s Ratio Perm					c0.19						0.38	
v/c Ratio		0.73			3.21dl						0.57	
Uniform Delay, d1		31.2			31.7						8.1	
Progression Factor		1.00			0.35						1.64	
Incremental Delay, d2		2.6			5.5						0.5	
Delay (s)		33.8			16.7						13.8	
Level of Service		C			B						B	
Approach Delay (s)		33.8			16.7			0.0			13.8	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

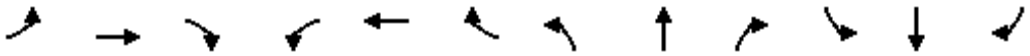
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



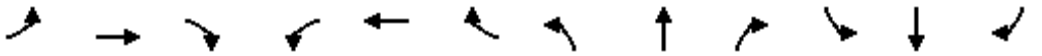
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Approach Volume (veh/h)		0			0			0			0	
Crossing Volume (veh/h)		0			0			0			0	
High Capacity (veh/h)		1385			1385			1385			1385	
High v/c (veh/h)		0.00			0.00			0.00			0.00	
Low Capacity (veh/h)		1161			1161			1161			1161	
Low v/c (veh/h)		0.00			0.00			0.00			0.00	

Intersection Summary					
Maximum v/c High	0.00				
Maximum v/c Low	0.00				
Intersection Capacity Utilization	0.0%	ICU Level of Service		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1773		1770	1810		1770	3461		1770	3486	
Flt Permitted	0.59	1.00		0.47	1.00		0.26	1.00		0.25	1.00	
Satd. Flow (perm)	1102	1773		882	1810		491	3461		466	3486	
Volume (vph)	62	188	89	119	163	38	88	728	126	26	565	63
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	81	247	117	156	214	50	116	956	165	34	742	83
RTOR Reduction (vph)	0	43	0	0	21	0	0	35	0	0	21	0
Lane Group Flow (vph)	81	321	0	156	243	0	116	1086	0	34	804	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	441	709		353	724		196	1384		186	1394	
v/s Ratio Prot		c0.18			0.13			c0.31			0.23	
v/s Ratio Perm	0.07			0.18			0.24			0.07		
v/c Ratio	0.18	0.45		0.44	0.34		0.59	0.78		0.18	0.58	
Uniform Delay, d1	7.8	8.8		8.7	8.3		9.4	10.5		7.8	9.4	
Progression Factor	1.00	1.00		1.00	1.00		0.78	0.83		0.98	1.00	
Incremental Delay, d2	0.9	2.1		4.0	1.3		7.9	2.9		0.8	0.6	
Delay (s)	8.7	10.9		12.7	9.6		15.3	11.5		8.4	9.9	
Level of Service	A	B		B	A		B	B		A	A	
Approach Delay (s)		10.5			10.7			11.9			9.9	
Approach LOS		B			B			B			A	

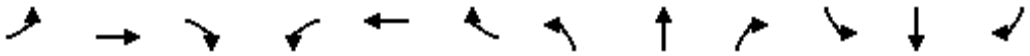
Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	3414		1770	1839		1770	1863	1583
Flt Permitted	0.41	1.00	1.00	0.17	1.00		0.15	1.00		0.25	1.00	1.00
Satd. Flow (perm)	761	1863	1583	324	3414		279	1839		457	1863	1583
Volume (vph)	213	441	138	50	289	89	88	416	39	88	541	163
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	292	604	189	68	396	122	121	570	53	121	741	223
RTOR Reduction (vph)	0	0	89	0	49	0	0	6	0	0	0	90
Lane Group Flow (vph)	292	604	100	68	469	0	121	617	0	121	741	133
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0		29.0	29.0	29.0
Effective Green, g (s)	23.0	23.0	23.0	23.0	23.0		29.0	29.0		29.0	29.0	29.0
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38		0.48	0.48		0.48	0.48	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	292	714	607	124	1309		135	889		221	900	765
v/s Ratio Prot		0.32			0.14			0.34			0.40	
v/s Ratio Perm	c0.38		0.06	0.21			c0.43			0.26		0.08
v/c Ratio	1.00	0.85	0.16	0.55	0.36		0.90	0.69		0.55	0.82	0.17
Uniform Delay, d1	18.5	16.9	12.2	14.4	13.2		14.1	12.1		10.9	13.3	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	52.7	9.1	0.1	4.9	0.2		53.6	4.5		9.4	8.4	0.5
Delay (s)	71.2	26.0	12.3	19.3	13.4		67.8	16.5		20.3	21.7	9.2
Level of Service	E	C	B	B	B		E	B		C	C	A
Approach Delay (s)		35.8			14.1			24.8			19.0	
Approach LOS		D			B			C			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

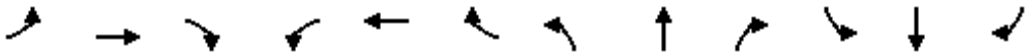


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		3425			3495						5030	
Flt Permitted		1.00			0.53						1.00	
Satd. Flow (perm)		3425			1889						5030	
Volume (vph)	0	454	125	112	327	0	0	0	0	100	1827	114
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	622	171	153	448	0	0	0	0	137	2502	156
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	790	0	0	601	0	0	0	0	0	2788	0
Turn Type	Perm			Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases	4			8						6		
Actuated Green, G (s)		24.9			24.9						54.2	
Effective Green, g (s)		26.9			26.9						55.1	
Actuated g/C Ratio		0.30			0.30						0.61	
Clearance Time (s)		6.0			6.0						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1024			565						3079	
v/s Ratio Prot		0.23										
v/s Ratio Perm					c0.32						0.55	
v/c Ratio		0.77			1.80dl						0.91	
Uniform Delay, d1		28.8			31.6						15.2	
Progression Factor		1.00			0.46						0.46	
Incremental Delay, d2		3.3			32.9						4.5	
Delay (s)		32.1			47.4						11.5	
Level of Service		C			D						B	
Approach Delay (s)		32.1			47.4			0.0			11.5	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

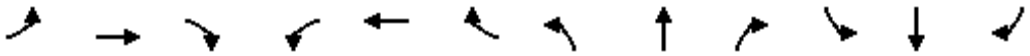
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	76	416	0	0	327	39	83	175	25	51	0	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	104	570	0	0	448	53	114	240	34	70	0	121

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	674	501	114	274	190
Volume Left (vph)	104	0	114	0	70
Volume Right (vph)	0	53	0	34	121
Hadj (s)	0.06	-0.03	0.53	-0.05	-0.27
Departure Headway (s)	7.6	7.5	9.1	8.5	8.7
Degree Utilization, x	1.42	1.05	0.29	0.65	0.46
Capacity (veh/h)	465	480	390	412	403
Control Delay (s)	223.7	81.0	14.5	24.5	18.9
Approach Delay (s)	223.7	81.0	21.5		18.9
Approach LOS	F	F	C		C

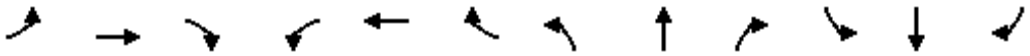
Intersection Summary				
Delay	115.9			
HCM Level of Service	F			
Intersection Capacity Utilization	94.8%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	150	352	50	27	290	72	37	355	36	89	439	88
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	205	482	68	37	397	99	51	486	49	122	601	121

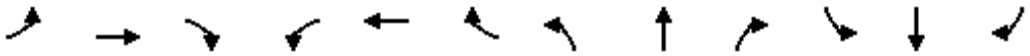
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	756	533	586	844
Volume Left (vph)	205	37	51	122
Volume Right (vph)	68	99	49	121
Hadj (s)	0.03	-0.06	0.00	-0.02
Departure Headway (s)	9.6	9.5	9.6	9.5
Degree Utilization, x	2.02	1.41	1.56	2.24
Capacity (veh/h)	381	389	389	385
Control Delay (s)	488.0	223.7	287.8	585.5
Approach Delay (s)	488.0	223.7	287.8	585.5
Approach LOS	F	F	F	F

Intersection Summary				
Delay	423.3			
HCM Level of Service	F			
Intersection Capacity Utilization	139.9%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1820		1770	1863	1583	1770	3495		1770	3494	
Flt Permitted	0.61	1.00		0.49	1.00	1.00	0.25	1.00		0.25	1.00	
Satd. Flow (perm)	1134	1820		918	1863	1583	466	3495		466	3494	
Volume (vph)	87	215	39	50	176	75	39	829	75	39	666	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	119	294	53	68	241	103	53	1135	103	53	912	85
RTOR Reduction (vph)	0	16	0	0	0	14	0	17	0	0	17	0
Lane Group Flow (vph)	119	331	0	68	241	89	53	1221	0	53	980	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Effective Green, g (s)	16.0	16.0		16.0	16.0	16.0	16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40	0.40	0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	454	728		367	745	633	186	1398		186	1398	
v/s Ratio Prot		c0.18			0.13			c0.35			0.28	
v/s Ratio Perm	0.10			0.07		0.06	0.11			0.11		
v/c Ratio	0.26	0.45		0.19	0.32	0.14	0.28	0.87		0.28	0.70	
Uniform Delay, d1	8.0	8.8		7.8	8.3	7.6	8.1	11.1		8.1	10.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.93	0.95	
Incremental Delay, d2	1.4	2.0		1.1	1.2	0.5	3.8	7.8		3.3	2.5	
Delay (s)	9.4	10.8		8.9	9.4	8.1	11.9	18.9		10.8	12.0	
Level of Service	A	B		A	A	A	B	B		B	B	
Approach Delay (s)		10.5			9.0			18.6			11.9	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

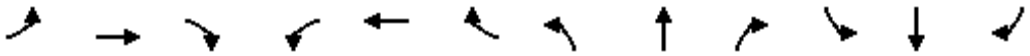


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.95						0.91	
Frt		0.92			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		3259			3433						5057	
Flt Permitted		1.00			0.65						1.00	
Satd. Flow (perm)		3259			2291						5057	
Volume (vph)	0	112	125	410	252	0	0	0	0	22	1754	62
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	147	164	538	331	0	0	0	0	29	2302	81
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	309	0	0	869	0	0	0	0	0	2408	0
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		32.1			32.1						43.5	
Effective Green, g (s)		32.6			32.6						44.4	
Actuated g/C Ratio		0.38			0.38						0.52	
Clearance Time (s)		4.5			4.5						4.9	
Vehicle Extension (s)		2.0			2.0						2.0	
Lane Grp Cap (vph)		1250			879						2642	
v/s Ratio Prot		0.09										
v/s Ratio Perm					c0.38						0.48	
v/c Ratio		0.25			1.40dl						0.91	
Uniform Delay, d1		17.8			26.0						18.5	
Progression Factor		1.00			0.32						1.00	
Incremental Delay, d2		0.0			6.7						6.1	
Delay (s)		17.9			15.0						24.6	
Level of Service		B			B						C	
Approach Delay (s)		17.9			15.0			0.0			24.6	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

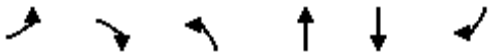
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	251	0	0	287	13	844	225	139	0	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	17	336	0	0	385	17	1131	302	186	0	0	0

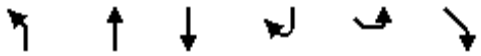
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	354	402	754	865
Volume Left (vph)	17	0	754	377
Volume Right (vph)	0	17	0	186
Hadj (s)	0.04	0.01	0.53	0.10
Departure Headway (s)	6.7	6.6	7.4	7.0
Degree Utilization, x	0.66	0.74	1.56	1.68
Capacity (veh/h)	522	540	489	521
Control Delay (s)	21.8	25.7	279.2	331.1
Approach Delay (s)	21.8	25.7	306.9	
Approach LOS	C	D	F	

Intersection Summary			
Delay	216.8		
HCM Level of Service	F		
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	
Lane Util. Factor					0.91	
Frt					0.95	
Flt Protected					1.00	
Satd. Flow (prot)					4834	
Flt Permitted					1.00	
Satd. Flow (perm)					4834	
Volume (vph)	0	0	0	0	1723	845
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	2238	1098
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3336	0
Turn Type						
Protected Phases					6	
Permitted Phases						
Actuated Green, G (s)					20.0	
Effective Green, g (s)					20.0	
Actuated g/C Ratio					1.00	
Clearance Time (s)					4.0	
Lane Grp Cap (vph)					4834	
v/s Ratio Prot					c0.69	
v/s Ratio Perm						
v/c Ratio					0.69	
Uniform Delay, d1					0.0	
Progression Factor					1.00	
Incremental Delay, d2					0.8	
Delay (s)					0.8	
Level of Service					A	
Approach Delay (s)	0.0			0.0	0.8	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

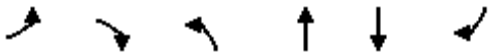
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

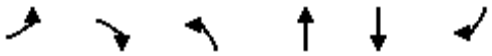
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Direction, Lane #						
Volume Total (vph)						
Volume Left (vph)						
Volume Right (vph)						
Hadj (s)						
Departure Headway (s)						
Degree Utilization, x						
Capacity (veh/h)						
Control Delay (s)						
Approach Delay (s)						
Approach LOS						

Intersection Summary			
Delay	0.0		
HCM Level of Service	A		
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		



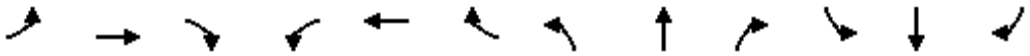
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #	
Volume Total (vph)	
Volume Left (vph)	
Volume Right (vph)	
Hadj (s)	
Departure Headway (s)	
Degree Utilization, x	
Capacity (veh/h)	
Control Delay (s)	
Approach Delay (s)	
Approach LOS	

Intersection Summary				
Delay	0.0			
HCM Level of Service	A			
Intersection Capacity Utilization	0.0%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			
Lane Util. Factor			0.91			
Frt			0.97			
Flt Protected			1.00			
Satd. Flow (prot)			4921			
Flt Permitted			1.00			
Satd. Flow (perm)			4921			
Volume (vph)	0	0	1925	528	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	2501	686	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	3187	0	0	0
Turn Type						
Protected Phases			2			
Permitted Phases						
Actuated Green, G (s)			20.0			
Effective Green, g (s)			20.0			
Actuated g/C Ratio			1.00			
Clearance Time (s)			4.0			
Lane Grp Cap (vph)			4921			
v/s Ratio Prot			c0.65			
v/s Ratio Perm						
v/c Ratio			0.65			
Uniform Delay, d1			0.0			
Progression Factor			1.00			
Incremental Delay, d2			0.7			
Delay (s)			0.7			
Level of Service			A			
Approach Delay (s)	0.0		0.7		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	20.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3459		3433	3539	1583	1770	5041	
Volume (vph)	276	1291	250	364	854	151	516	1007	326	200	806	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	378	1768	342	499	1170	207	707	1379	446	274	1104	68
RTOR Reduction (vph)	0	0	80	0	12	0	0	0	181	0	6	0
Lane Group Flow (vph)	378	1768	262	499	1365	0	707	1379	265	274	1166	0
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	16.6	28.6	28.6	19.9	31.9		12.5	29.5	29.5	12.5	29.5	
Effective Green, g (s)	17.6	29.6	29.6	20.9	32.9		12.5	31.0	31.0	12.5	31.0	
Actuated g/C Ratio	0.16	0.27	0.27	0.19	0.30		0.11	0.28	0.28	0.11	0.28	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	5.5	5.5	4.0	5.5	
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lane Grp Cap (vph)	549	952	426	652	1035		390	997	446	201	1421	
v/s Ratio Prot	0.11	c0.50		c0.15	c0.39		c0.21	c0.39		c0.15	0.23	
v/s Ratio Perm			0.17						0.17			
v/c Ratio	0.69	1.86	0.61	0.77	1.32		1.81	1.38	0.59	1.36	0.82	
Uniform Delay, d1	43.6	40.2	35.2	42.2	38.5		48.8	39.5	34.1	48.8	36.9	
Progression Factor	0.71	1.28	1.50	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	386.1	0.2	5.1	150.4		375.8	178.7	5.7	192.0	5.4	
Delay (s)	31.1	437.5	53.2	47.3	188.9		424.5	218.2	39.8	240.8	42.3	
Level of Service	C	F	D	D	F		F	F	D	F	D	
Approach Delay (s)		322.9			151.3			244.4			79.9	
Approach LOS		F			F			F			E	

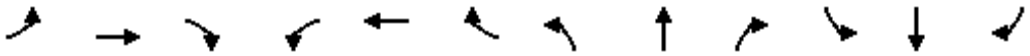
Intersection Summary			
HCM Average Control Delay	218.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	120.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.97			0.98				
Flt Protected		1.00			1.00			1.00				
Satd. Flow (prot)		3526			3441			4998				
Flt Permitted		0.66			1.00			1.00				
Satd. Flow (perm)		2333			3441			4998				
Volume (vph)	38	483	0	0	552	125	64	1800	218	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	52	662	0	0	756	171	88	2465	299	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	16	0	0	0	0
Lane Group Flow (vph)	0	714	0	0	925	0	0	2836	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.1			28.1			52.5				
Effective Green, g (s)		28.6			28.6			53.4				
Actuated g/C Ratio		0.32			0.32			0.59				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		741			1093			2965				
v/s Ratio Prot					0.27							
v/s Ratio Perm		c0.31						0.57				
v/c Ratio		0.96			0.85			0.96				
Uniform Delay, d1		30.2			28.6			17.2				
Progression Factor		0.32			1.00			1.25				
Incremental Delay, d2		17.3			5.9			7.1				
Delay (s)		27.0			34.6			28.6				
Level of Service		C			C			C				
Approach Delay (s)		27.0			34.6			28.6			0.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM Average Control Delay	29.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

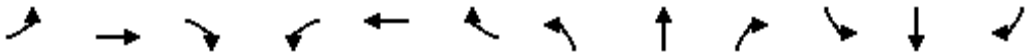


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.98			0.99				
Flt Protected		0.98			1.00			1.00				
Satd. Flow (prot)		3469			3469			5038				
Flt Permitted		0.58			1.00			1.00				
Satd. Flow (perm)		2057			3469			5038				
Volume (vph)	163	238	0	0	325	49	101	1741	87	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	212	309	0	0	422	64	131	2262	113	0	0	0
RTOR Reduction (vph)	0	0	0	0	8	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	521	0	0	478	0	0	2500	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.1			21.1			59.0				
Effective Green, g (s)		22.1			22.1			59.9				
Actuated g/C Ratio		0.25			0.25			0.67				
Clearance Time (s)		5.0			5.0			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		505			852			3353				
v/s Ratio Prot					0.14							
v/s Ratio Perm		c0.25						0.50				
v/c Ratio		1.45dl			0.56			0.75				
Uniform Delay, d1		34.0			29.7			10.0				
Progression Factor		0.35			1.00			0.61				
Incremental Delay, d2		41.3			0.5			0.6				
Delay (s)		53.0			30.2			6.7				
Level of Service		D			C			A				
Approach Delay (s)		53.0			30.2			6.7			0.0	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

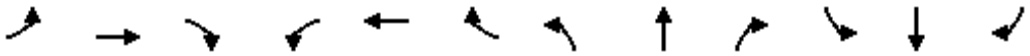


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0		4.0				
Lane Util. Factor		0.95			1.00	1.00		0.91				
Frt		1.00			1.00	0.85		0.99				
Flt Protected		0.99			1.00	1.00		1.00				
Satd. Flow (prot)		3501			1863	1583		5048				
Flt Permitted		0.55			1.00	1.00		1.00				
Satd. Flow (perm)		1955			1863	1583		5048				
Volume (vph)	100	353	0	0	439	112	89	1988	76	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	137	483	0	0	601	153	122	2723	104	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	4	0	0	0	0
Lane Group Flow (vph)	0	620	0	0	601	152	0	2945	0	0	0	0
Turn Type	Perm			Perm		Perm	Perm					
Protected Phases		4			8			2				
Permitted Phases	4			8		8	2					
Actuated Green, G (s)		24.9			24.9	24.9		54.2				
Effective Green, g (s)		26.9			26.9	26.9		55.1				
Actuated g/C Ratio		0.30			0.30	0.30		0.61				
Clearance Time (s)		6.0			6.0	6.0		4.9				
Vehicle Extension (s)		2.0			2.0	2.0		2.0				
Lane Grp Cap (vph)		584			557	473		3090				
v/s Ratio Prot					c0.32							
v/s Ratio Perm		0.32				0.10		0.58				
v/c Ratio		1.61dl			1.08	0.32		0.95				
Uniform Delay, d1		31.6			31.6	24.5		16.2				
Progression Factor		0.36			1.00	1.00		1.00				
Incremental Delay, d2		46.2			61.2	0.1		8.4				
Delay (s)		57.7			92.7	24.6		24.7				
Level of Service		E			F	C		C				
Approach Delay (s)		57.7			78.9			24.7			0.0	
Approach LOS		E			E			C			A	

Intersection Summary			
HCM Average Control Delay	38.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		

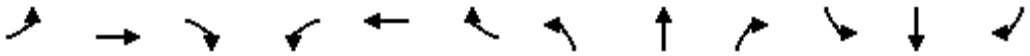
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

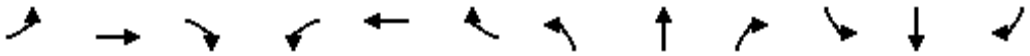
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frt		1.00			0.94			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		3500			3338			5010				
Flt Permitted		0.63			1.00			1.00				
Satd. Flow (perm)		2231			3338			5010				
Volume (vph)	25	88	0	0	662	404	49	1596	163	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	33	116	0	0	869	530	64	2095	214	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	14	0	0	0	0
Lane Group Flow (vph)	0	149	0	0	1396	0	0	2359	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		32.1			32.1			43.5				
Effective Green, g (s)		32.6			32.6			44.4				
Actuated g/C Ratio		0.38			0.38			0.52				
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		856			1280			2617				
v/s Ratio Prot					c0.42							
v/s Ratio Perm		0.07						0.47				
v/c Ratio		0.17			1.09			0.90				
Uniform Delay, d1		17.3			26.2			18.3				
Progression Factor		0.34			1.00			1.00				
Incremental Delay, d2		0.0			53.6			5.6				
Delay (s)		5.9			79.8			23.9				
Level of Service		A			E			C				
Approach Delay (s)		5.9			79.8			23.9			0.0	
Approach LOS		A			E			C			A	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		

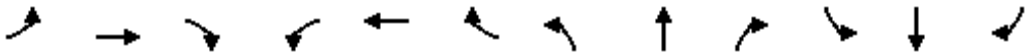
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97		1.00					0.91	1.00	1.00	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433		1583					5085	1583	1770	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433		1583					5085	1583	1770	5085	
Volume (vph)	981	0	678	0	0	0	0	1473	390	592	1121	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	1274	0	881	0	0	0	0	1913	507	769	1456	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	0	335	0	0	0
Lane Group Flow (vph)	1274	0	835	0	0	0	0	1913	172	769	1456	0
Turn Type	custom		custom						Perm	Prot		
Protected Phases								2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	19.0		19.0					24.0	24.0	28.0	56.5	
Effective Green, g (s)	20.0		20.0					24.5	24.5	28.5	57.0	
Actuated g/C Ratio	0.24		0.24					0.29	0.29	0.34	0.67	
Clearance Time (s)	5.0		5.0					4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	2.0	4.0	
Lane Grp Cap (vph)	808		372					1466	456	593	3410	
v/s Ratio Prot								c0.38		c0.43	0.29	
v/s Ratio Perm	0.37		c0.53						0.11			
v/c Ratio	1.58		2.24					1.30	0.38	1.30	0.43	
Uniform Delay, d1	32.5		32.5					30.2	24.2	28.2	6.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	265.5		568.8					142.3	2.4	145.7	0.4	
Delay (s)	298.0		601.3					172.5	26.5	174.0	6.9	
Level of Service	F		F					F	C	F	A	
Approach Delay (s)		422.0			0.0			141.9			64.6	
Approach LOS		F			A			F			E	

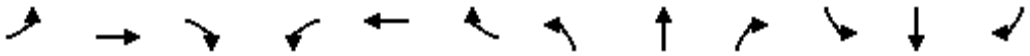
Intersection Summary			
HCM Average Control Delay	205.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%	126%
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.95			0.91			1.00	
Frt		1.00			0.96			0.99			1.00	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		3491			3381			5003			0	
Flt Permitted		0.68			1.00			1.00			1.00	
Satd. Flow (perm)		2422			3381			5003			0	
Volume (vph)	24	63	0	0	768	327	37	1114	125	0	2	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	68	0	0	835	355	40	1211	136	0	2	0
RTOR Reduction (vph)	0	0	0	0	38	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	94	0	0	1152	0	0	1370	0	0	2	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		28.6			28.6			42.0			0.0	
Effective Green, g (s)		29.1			29.1			42.9			0.0	
Actuated g/C Ratio		0.36			0.36			0.54			0.00	
Clearance Time (s)		4.5			4.5			4.9				
Vehicle Extension (s)		2.0			2.0			2.0				
Lane Grp Cap (vph)		881			1230			2683			0	
v/s Ratio Prot					c0.34							
v/s Ratio Perm		0.04						0.27				
v/c Ratio		0.11			0.94			0.51			no cap	
Uniform Delay, d1		16.8			24.6			11.8			Error	
Progression Factor		0.48			1.00			1.00				
Incremental Delay, d2		0.0			13.0			0.7			Error	
Delay (s)		8.2			37.6			12.5			Error	
Level of Service		A			D			B			F	
Approach Delay (s)		8.2			37.6			12.5			Error	
Approach LOS		A			D			B			F	

Intersection Summary			
HCM Average Control Delay	Error	HCM Level of Service	F
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX D
Air Quality Data

5/27/2010 10:35:16 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_Existing.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	27.99	10.38	22.38	0.00	0.07	0.07	12,607.31

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	177.05	252.71	2,260.85	2.51	412.61	80.32	245,820.04

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	205.04	263.09	2,283.23	2.51	412.68	80.39	258,427.35

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.76	10.19	6.66	0.00	0.02	0.02	12,580.44
Hearth							
Landscape	2.06	0.19	15.72	0.00	0.05	0.05	26.87
Consumer Products	17.90						
Architectural Coatings	7.27						
TOTALS (lbs/day, unmitigated)	27.99	10.38	22.38	0.00	0.07	0.07	12,607.31

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	12.91	17.22	159.00	0.17	28.13	5.48	16,862.93
Apartments low rise	7.32	9.07	83.73	0.09	14.81	2.89	8,879.47
Strip mall	78.63	116.13	1,024.64	1.15	189.04	36.79	112,368.63
General office building	11.62	16.06	145.50	0.16	26.35	5.13	15,726.25
Goverment office building	35.82	53.56	475.88	0.53	87.36	17.00	51,984.88
General light industry	30.75	40.67	372.10	0.41	66.92	13.03	39,997.88
TOTALS (lbs/day, unmitigated)	177.05	252.71	2,260.85	2.51	412.61	80.32	245,820.04

Operational Settings:

5/27/2010 10:35:16 AM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	59.67	9.00	dwelling units	179.00	1,611.00	16,275.61
Apartments low rise	10.62	4.99	dwelling units	170.00	848.30	8,570.20
Strip mall		35.00	1000 sq ft	348.43	12,195.05	109,426.18
General office building		11.01	1000 sq ft	136.10	1,498.46	15,250.59
Goverment office building		68.93	1000 sq ft	79.18	5,457.88	50,567.23
General light industry		6.97	1000 sq ft	518.06	3,610.88	38,726.67
					25,221.57	238,816.48

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_Existing.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	25.93	10.19	6.66	0.00	0.02	0.02	12,580.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	196.66	304.36	2,169.81	2.09	412.61	80.32	222,566.86

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	222.59	314.55	2,176.47	2.09	412.63	80.34	235,147.30

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.76	10.19	6.66	0.00	0.02	0.02	12,580.44
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	17.90						
Architectural Coatings	7.27						
TOTALS (lbs/day, unmitigated)	25.93	10.19	6.66	0.00	0.02	0.02	12,580.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	13.91	20.75	152.00	0.14	28.13	5.48	15,278.20
Apartments low rise	7.56	10.93	80.04	0.08	14.81	2.89	8,045.00
Strip mall	88.88	139.80	987.46	0.96	189.04	36.79	101,713.98
General office building	12.69	19.36	138.90	0.13	26.35	5.13	14,241.33
Goverment office building	40.84	64.49	457.45	0.44	87.36	17.00	47,061.23
General light industry	32.78	49.03	353.96	0.34	66.92	13.03	36,227.12
TOTALS (lbs/day, unmitigated)	196.66	304.36	2,169.81	2.09	412.61	80.32	222,566.86

Operational Settings:

5/27/2010 10:35:42 AM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	59.67	9.00	dwelling units	179.00	1,611.00	16,275.61
Apartments low rise	10.62	4.99	dwelling units	170.00	848.30	8,570.20
Strip mall		35.00	1000 sq ft	348.43	12,195.05	109,426.18
General office building		11.01	1000 sq ft	136.10	1,498.46	15,250.59
Goverment office building		68.93	1000 sq ft	79.18	5,457.88	50,567.23
General light industry		6.97	1000 sq ft	518.06	3,610.88	38,726.67
					25,221.57	238,816.48

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_Existing.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	5.12	1.90	4.09	0.00	0.01	0.01	2,300.83

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	33.51	49.26	407.06	0.44	75.29	14.66	43,447.59

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	38.63	51.16	411.15	0.44	75.30	14.67	45,748.42

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.14	1.86	1.22	0.00	0.00	0.00	2,295.93
Hearth							
Landscape	0.38	0.04	2.87	0.00	0.01	0.01	4.90
Consumer Products	3.27						
Architectural Coatings	1.33						
TOTALS (tons/year, unmitigated)	5.12	1.90	4.09	0.00	0.01	0.01	2,300.83

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	2.42	3.36	28.59	0.03	5.13	1.00	2,981.08
Apartments low rise	1.35	1.77	15.06	0.02	2.70	0.53	1,569.74
Strip mall	14.97	22.63	184.73	0.20	34.50	6.71	19,859.12
General office building	2.19	3.13	26.15	0.03	4.81	0.94	2,779.71
Goverment office building	6.84	10.44	85.73	0.09	15.94	3.10	9,187.72
General light industry	5.74	7.93	66.80	0.07	12.21	2.38	7,070.22
TOTALS (tons/year, unmitigated)	33.51	49.26	407.06	0.44	75.29	14.66	43,447.59

Operational Settings:

5/27/2010 10:35:55 AM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	59.67	9.00	dwelling units	179.00	1,611.00	16,275.61
Apartments low rise	10.62	4.99	dwelling units	170.00	848.30	8,570.20
Strip mall		35.00	1000 sq ft	348.43	12,195.05	109,426.18
General office building		11.01	1000 sq ft	136.10	1,498.46	15,250.59
Goverment office building		68.93	1000 sq ft	79.18	5,457.88	50,567.23
General light industry		6.97	1000 sq ft	518.06	3,610.88	38,726.67
					25,221.57	238,816.48

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_SP Buildout.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	87.68	23.59	29.65	0.00	0.09	0.09	29,272.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	246.16	346.70	3,109.37	3.47	565.66	110.13	337,202.92

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	333.84	370.29	3,139.02	3.47	565.75	110.22	366,475.35

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.77	23.38	13.19	0.00	0.04	0.04	29,244.04
Hearth							
Landscape	2.04	0.21	16.46	0.00	0.05	0.05	28.39
Consumer Products	75.98						
Architectural Coatings	7.89						
TOTALS (lbs/day, unmitigated)	87.68	23.59	29.65	0.00	0.09	0.09	29,272.43

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	11.61	15.49	143.01	0.16	25.30	4.93	15,167.21
Apartments low rise	56.84	70.40	650.10	0.71	115.01	22.42	68,946.44
Strip mall	116.99	172.79	1,524.56	1.71	281.27	54.73	167,193.60
General office building	15.89	21.97	198.96	0.22	36.03	7.02	21,503.71
Office park	13.43	19.59	178.95	0.20	32.21	6.27	19,249.01
Goverment office building	28.62	42.79	380.20	0.43	69.80	13.58	41,532.75
General light industry	2.78	3.67	33.59	0.04	6.04	1.18	3,610.20
TOTALS (lbs/day, unmitigated)	246.16	346.70	3,109.37	3.47	565.66	110.13	337,202.92

5/27/2010 10:37:13 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	53.67	9.00	dwelling units	161.00	1,449.00	14,638.96
Apartments low rise	82.50	4.99	dwelling units	1,320.00	6,586.80	66,545.12
Strip mall		35.00	1000 sq ft	518.43	18,145.05	162,815.52
General office building		11.01	1000 sq ft	186.10	2,048.96	20,853.30
Office park		35.00	1000 sq ft	50.00	1,750.00	18,641.00
Goverment office building		68.93	1000 sq ft	63.26	4,360.51	40,400.14
General light industry		6.97	1000 sq ft	46.76	325.92	3,495.46
					34,666.24	327,389.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_SP Buildout.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	85.64	23.38	13.19	0.00	0.04	0.04	29,244.04

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	271.57	417.54	2,985.09	2.86	565.66	110.13	305,325.55

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	357.21	440.92	2,998.28	2.86	565.70	110.17	334,569.59

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.77	23.38	13.19	0.00	0.04	0.04	29,244.04
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	75.98						
Architectural Coatings	7.89						
TOTALS (lbs/day, unmitigated)	85.64	23.38	13.19	0.00	0.04	0.04	29,244.04

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	12.51	18.66	136.72	0.13	25.30	4.93	13,741.84
Apartments low rise	58.72	84.84	621.48	0.59	115.01	22.42	62,467.05
Strip mall	132.24	208.01	1,469.24	1.42	281.27	54.73	151,340.52
General office building	17.35	26.47	189.93	0.18	36.03	7.02	19,473.26
Office park	15.16	23.61	170.30	0.16	32.21	6.27	17,433.97
Goverment office building	32.63	51.52	365.47	0.35	69.80	13.58	37,599.06
General light industry	2.96	4.43	31.95	0.03	6.04	1.18	3,269.85
TOTALS (lbs/day, unmitigated)	271.57	417.54	2,985.09	2.86	565.66	110.13	305,325.55

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Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	53.67	9.00	dwelling units	161.00	1,449.00	14,638.96
Apartments low rise	82.50	4.99	dwelling units	1,320.00	6,586.80	66,545.12
Strip mall		35.00	1000 sq ft	518.43	18,145.05	162,815.52
General office building		11.01	1000 sq ft	186.10	2,048.96	20,853.30
Office park		35.00	1000 sq ft	50.00	1,750.00	18,641.00
Goverment office building		68.93	1000 sq ft	63.26	4,360.51	40,400.14
General light industry		6.97	1000 sq ft	46.76	325.92	3,495.46
					34,666.24	327,389.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Downtown Upland_SP Buildout.urb924

Project Name: Downtown Upland

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	16.00	4.31	5.41	0.00	0.02	0.02	5,342.22

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	46.48	67.59	559.90	0.59	103.24	20.09	59,600.34

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	62.48	71.90	565.31	0.59	103.26	20.11	64,942.56

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.32	4.27	2.41	0.00	0.01	0.01	5,337.04
Hearth							
Landscape	0.37	0.04	3.00	0.00	0.01	0.01	5.18
Consumer Products	13.87						
Architectural Coatings	1.44						
TOTALS (tons/year, unmitigated)	16.00	4.31	5.41	0.00	0.02	0.02	5,342.22

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	2.17	3.02	25.72	0.03	4.62	0.90	2,681.31
Apartments low rise	10.49	13.73	116.90	0.12	20.99	4.09	12,188.56
Strip mall	22.28	33.68	274.87	0.29	51.33	9.99	29,548.44
General office building	2.99	4.28	35.76	0.04	6.58	1.28	3,800.91
Office park	2.56	3.82	32.13	0.03	5.88	1.14	3,402.53
Goverment office building	5.47	8.34	68.49	0.07	12.74	2.48	7,340.43
General light industry	0.52	0.72	6.03	0.01	1.10	0.21	638.16
TOTALS (tons/year, unmitigated)	46.48	67.59	559.90	0.59	103.24	20.09	59,600.34

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Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	53.67	9.00	dwelling units	161.00	1,449.00	14,638.96
Apartments low rise	82.50	4.99	dwelling units	1,320.00	6,586.80	66,545.12
Strip mall		35.00	1000 sq ft	518.43	18,145.05	162,815.52
General office building		11.01	1000 sq ft	186.10	2,048.96	20,853.30
Office park		35.00	1000 sq ft	50.00	1,750.00	18,641.00
Goverment office building		68.93	1000 sq ft	63.26	4,360.51	40,400.14
General light industry		6.97	1000 sq ft	46.76	325.92	3,495.46
					34,666.24	327,389.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Office park				48.0	24.0	28.0
Goverment office building				10.0	5.0	85.0
General light industry				50.0	25.0	25.0

Emissions From Natural Gas Consumed By Land Uses

Land Use	*Amount*	Cubic feet per unit/square feet/customer per month	*CO* 2.00E+01	*ROG* 5.30E+00	*NO_X* *Residential* 8.00E+01	*NO_X* *Non-Residential* 1.20E+02	*SO_X* negligible	*PM_{10}* 2.00E-01	*CO_2* 0.12	*N_2O* 2.20E-06	*CH_4* 2.30E-06
Residential											
Single Family Units	-18	6,665	-0.08	-0.02	-0.32	-0.48	--	0.00	-473.57	-0.01	-0.01
Multi-Family Units	1,150	4,011.5	3.08	0.82	12.30	18.45	--	0.03	18,210.10	0.33	0.35
NonResidential											
Indutsrial	-471,295	25	-7.85	-2.08	-31.42	-47.13	--	-0.08	-46,509.38	-0.85	-0.89
Hotel/Motel		45	0.00	0.00	0.00	0.00	--	0.00	0.00	0.00	0.00
Retail/Shopping Center	170000	49.7	5.63	1.49	22.53	33.80	--	0.06	33,351.32	0.61	0.64
Office	84,079	40.0	2.24	0.59	8.97	13.45	--	0.02	13,275.63	0.24	0.25
Blank		5.0	0.00	0.00	0.00		--	0.00	0.00	0.00	0.00
TOTAL - pounds per day	**--**	**--**	**3.02E+00**	**7.99E-01**	**1.21E+01**	**1.81E+01**	**--**	**3.02E-02**	**17,854.11**	**0.33**	**0.34**
TOTAL - tons per year	**--**	**--**	**5.50E-01**	**1.46E-01**	**2.20E+00**	**3.30E+00**	**--**	**5.50E-03**	**3,258.3742**	**0.0597**	**0.0625**
TOTAL - metric tons per year	**--**	**--**	**4.99E-01**	**1.32E-01**	**2.00E+00**	**3.00E+00**	**--**	**4.99E-03**	**2.96E+03**	**5.42E-02**	**5.67E-02**

	CO_2	N_2O	CH_4
metric tons per year	2955.95	0.05	0.06
metric tons CO_2eq per year	2,955.95	16.80	1.19

Notes:

1. Usage rate; average for SCE and LADWP.

Source:

South Coast Air Quality Management District, *CEQA Air Quality Handbook* , November 1993, Table A9-12.

Emissions From Electricity Consumed By Land Uses

Land Use	*Amount*	kilowatt-hours per year[1]	*CO* 2.00E-04	*ROG* 1.00E-05	*NO_X* 1.15E-03	*SO_X* 1.20E-04	*PM_{10}* 4.00E-05	*CO_2* 0.772	*N_2O* 6.59E-06	*CH_4* 4.04E-05
Residential (Dwelling Units)	1,132	5626.5	3.49	0.17	20.07	2.09	0.70	13,471.29	0.11	0.70
Food Store (SF)		53.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Restaurant (SF)		47.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hospitals (SF)		21.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail (SF)	170,000	13.55	1.26	0.06	7.26	0.76	0.25	4,872.06	0.04	0.25
College/University (SF)		11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High School (SF)		10.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elementary School (SF)		5.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office (SF)	50,000	12.95	0.35	0.02	2.04	0.21	0.07	1,369.51	0.01	0.07
Hotel/Motel (SF)		9.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warehouse (SF)	-471,295	4.35	-1.12	-0.06	-6.46	-0.67	-0.22	-4,336.17	-0.04	-0.23
Miscellaneous (SF)	34,079	10.5	0.20	0.01	1.13	0.12	0.04	756.83	0.01	0.04
Blank			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL - pounds per day	**--**	**--**	**4.18E-03**	**2.09E-01**	**2.40E+01**	**2.51E+00**	**8.36E-01**	**16,133.52**	**0.14**	**0.84**
TOTAL - tons per year	**--**	**--**	**7.63E-04**	**3.81E-02**	**4.39E+00**	**4.58E-01**	**1.53E-01**	**2,944.37**	**0.03**	**0.15**
TOTAL - metric tons per year	**--**	**--**	**6.92E-04**	**3.46E-02**	**3.98E+00**	**4.15E-01**	**1.38E-01**	**2671.08**	**0.02**	**0.14**

	CO_2	N_2O	CH_4
metric tons per year	2,671.08	0.02	0.14
metric tons CO_2eq per year	2,671.08	7.07	2.93

Notes:

1. Usage rate; average for SCE and LADWP.

Source for greenhouse gas emissions rates:

U.S. Energy Information Administration, *Domestic Electricity Emissions Factors 1999-2002* , October 2007. http://www.eia.doe.gov/oiaf/1605/techassist.html

Mobile Source Emissions Calculations

	Total	Breakdown		Emission Factor		Total Emis Passenger	Total Emis Delivery	Passnger	Delivery	Total Emissions	
	VMT	Passnger	Delivery	Passnger	Delivery	pounds/day		tons/year	tons/year	tons/year	metric tons/year
CO	11,322	10755.90	566.10	0.00709228	0.01407778	76.28	7.97	13.92	1.45	15.38	13.95
NO_X	11,322	10755.90	566.10	0.00071158	0.01577311	7.65	8.93	1.40	1.63	3.03	2.75
N_2O[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.15	0.13
ROG	11,322	10755.90	566.10	0.00074567	0.00206295	8.02	1.17	1.46	0.21	1.68	1.52
SO_X	11,322	10755.90	566.10	0.00001072	0.00002682	0.12	0.02	0.02	0.00	0.02	0.02
PM_{10}	11,322	10755.90	566.10	0.00009067	0.00059956	0.98	0.34	0.18	0.06	0.24	0.22
$PM_{2.5}$	11,322	10755.90	566.10	0.00005834	0.00050174	0.63	0.28	0.11	0.05	0.17	0.15
CH_4	11,322	10755.90	566.10	0.00006707	0.00009703	0.72	0.05	0.13	0.01	0.14	0.13
CO_2	11,322	10755.90	566.10	1.10087435	2.78163459	11840.89	1574.68	2160.96	287.38	2448.34	2,221.10

	CO_2	N_2O	CH_4
metric tons per year	2,221.10	0.13	0.13
metric tons CO_2eq per year	2,221.10	41.47	2.70

Notes:

1. VMT based upon URBEMIS 2007 model output.
2. Emission Factor based upon EMFAC 2007 (version 2.3), *Highest (Most Conservative) Emission Factors fo On-Road Passenger Vehicles and Delivery Trucks* .
3. Breakdown of Passenger and Delivery Trucks assumes 95% auto and 5% truck.
4. Emission Factor for N_2O based upon a conversion ratio of 0.04873 from NO_X to N_2O. Based upon California Air Resources Board: *Estimates of Nitrous Oxide*

Water Consumption Indirect Emissions

	Acre Feet per year	Electricity Usage kWh/year	Units	*CO* 2.00E-04	*ROG* 1.00E-05	*NO_X* 1.15E-03	*SO_X* 1.20E-04	*PM_{10}* 4.00E-05	*CO_2* 0.772	*N_2O* 6.59E-06	*CH_4* 4.04E-05
Project Demand	465	652,581	pounds/yr	1.31E+02	6.53E+00	7.50E+02	7.83E+01	2.61E+01	5.04E+05	4.30E+00	2.63E+01
			tons/yr	6.53E-02	3.26E-03	3.75E-01	3.92E-02	1.31E-02	2.52E+02	2.15E-03	1.32E-02
			mt/yr	5.92E-02	2.96E-03	3.40E-01	3.55E-02	1.18E-02	2.29E+02	1.95E-03	1.19E-02
								$MTCO_2EQ$	228.52	0.67	0.28

Energy Factor 366 kWh/acre-foot (local)
3,824 kWh/acre-foot (import)

Based on energy usage factors for water conveyance from the California Energy Commission, Water Energy Use in California, Accessed May 2009.
http://www.energy.ca.gov/research/iaw/industry/water.html

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.051	0.094	0.137	1.624	1.669	4.679	0.194
35	0.008	0.014	0.022	0.187	0.322	1.804	0.033

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.986	1.686	2.153	5.479	16.398	22.083	1.781
35	0.584	0.990	1.120	1.161	2.981	14.299	0.911

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.086	0.172	0.303	5.707	15.753	1.386	0.489
35	0.049	0.096	0.186	2.210	7.475	1.263	0.223

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	943.915	1189.699	1706.994	2984.276	2488.380	266.237	1244.145
35	307.060	387.167	521.702	1557.773	1663.492	139.883	433.784

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.009	0.011	0.016	0.029	0.024	0.003	0.012
35	0.003	0.004	0.005	0.015	0.016	0.002	0.004

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.054	0.121	0.120	0.167	0.382	0.023	0.091
35	0.009	0.020	0.020	0.076	0.091	0.011	0.018

Pollutant Name: PM2.5 - Tire Wear Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.002	0.002	0.002	0.006	0.002	0.001	0.002
35	0.002	0.002	0.002	0.006	0.002	0.001	0.002

Pollutant Name: PM2.5 - Break Wear Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.005	0.005	0.005	0.009	0.005	0.003	0.006
35	0.005	0.005	0.005	0.009	0.005	0.003	0.006

Pollutant Name: Gasoline - mi/gal Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	9.370	7.426	5.127	3.508	3.460	28.045	8.157
35	28.769	22.790	16.927	17.727	17.497	52.659	25.061

Pollutant Name: Diesel - mi/gal Temperature: 70F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	29.156	29.156	19.465	3.996	4.079	0.000	6.189
35	29.156	29.156	19.465	5.914	4.079	0.000	7.802

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast
****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.006	0.010	0.036	0.054	0.176	0.653	0.021
10	0.011	0.019	0.071	0.106	0.342	0.805	0.038
20	0.022	0.038	0.138	0.201	0.649	1.096	0.069
30	0.032	0.055	0.201	0.284	0.919	1.371	0.098
40	0.041	0.071	0.260	0.357	1.155	1.630	0.125
50	0.050	0.086	0.315	0.419	1.354	1.874	0.150
60	0.058	0.100	0.366	0.470	1.518	2.051	0.172
120	0.090	0.161	0.581	0.528	1.707	2.317	0.253
180	0.087	0.157	0.580	0.560	1.811	2.345	0.253
240	0.093	0.167	0.617	0.591	1.912	2.494	0.268
300	0.098	0.176	0.653	0.622	2.010	2.639	0.284
360	0.103	0.186	0.689	0.651	2.104	2.781	0.299
420	0.108	0.195	0.724	0.679	2.195	2.920	0.314
480	0.113	0.205	0.759	0.706	2.283	3.056	0.329
540	0.119	0.214	0.794	0.732	2.367	3.189	0.343
600	0.124	0.224	0.829	0.757	2.448	3.319	0.358
660	0.129	0.233	0.863	0.781	2.526	3.445	0.372
720	0.134	0.242	0.897	0.804	2.600	3.569	0.386

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.090	0.154	0.454	0.841	1.929	2.983	0.249
10	0.178	0.305	0.897	1.648	3.779	3.591	0.473
20	0.347	0.595	1.748	3.160	7.245	4.755	0.900
30	0.507	0.870	2.554	4.535	10.397	5.851	1.302
40	0.658	1.130	3.315	5.773	13.236	6.879	1.677
50	0.800	1.374	4.029	6.874	15.761	7.839	2.027
60	0.933	1.604	4.698	7.839	17.973	8.731	2.350
120	1.469	2.532	7.253	9.155	20.989	12.361	3.477
180	1.383	2.395	6.986	9.422	21.603	11.985	3.358
240	1.497	2.595	7.562	9.699	22.236	13.004	3.607
300	1.598	2.773	8.072	9.984	22.890	13.945	3.830
360	1.686	2.927	8.516	10.278	23.565	14.808	4.027
420	1.761	3.058	8.894	10.581	24.259	15.594	4.198
480	1.823	3.166	9.206	10.893	24.974	16.302	4.343
540	1.871	3.250	9.451	11.213	25.709	16.932	4.462
600	1.907	3.311	9.630	11.543	26.464	17.484	4.555
660	1.929	3.348	9.744	11.881	27.239	17.959	4.622
720	1.939	3.362	9.791	12.228	28.035	18.356	4.664

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.041	0.092	0.603	0.208	0.826	0.154	0.180
10	0.044	0.098	0.642	0.314	1.245	0.193	0.197
20	0.049	0.108	0.711	0.500	1.980	0.262	0.228
30	0.053	0.117	0.770	0.651	2.580	0.320	0.254
40	0.057	0.124	0.818	0.767	3.043	0.365	0.275

50	0.060	0.130	0.857	0.850	3.370	0.398	0.291
60	0.062	0.135	0.886	0.898	3.560	0.419	0.302
120	0.067	0.146	0.960	0.905	3.586	0.421	0.322
180	0.067	0.147	0.960	0.901	3.573	0.418	0.323
240	0.067	0.145	0.953	0.896	3.553	0.411	0.320
300	0.066	0.144	0.941	0.889	3.526	0.403	0.317
360	0.065	0.141	0.925	0.881	3.492	0.393	0.311
420	0.063	0.138	0.904	0.870	3.451	0.382	0.305
480	0.062	0.134	0.879	0.858	3.403	0.368	0.297
540	0.060	0.129	0.849	0.844	3.348	0.353	0.288
600	0.057	0.124	0.815	0.829	3.286	0.337	0.277
660	0.055	0.118	0.776	0.811	3.217	0.318	0.266
720	0.052	0.112	0.733	0.792	3.141	0.298	0.252

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	12.218	15.365	21.688	2.794	3.896	13.285	14.490
10	13.714	17.260	24.553	5.572	7.770	15.482	16.456
20	17.207	21.680	31.157	11.083	15.453	19.797	20.964
30	21.367	26.937	38.928	16.532	23.050	24.005	26.242
40	26.195	33.033	47.865	21.919	30.561	28.106	32.287
50	31.690	39.967	57.969	27.244	37.986	32.099	39.101
60	37.853	47.740	69.239	32.507	45.324	35.985	46.683
120	88.224	111.150	159.621	55.289	77.088	53.438	106.988
180	100.140	126.177	181.401	65.319	91.074	57.672	121.612
240	112.038	141.178	203.096	74.758	104.234	61.658	136.166
300	123.917	156.152	224.709	83.605	116.569	65.396	150.652
360	135.778	171.099	246.238	91.859	128.078	68.885	165.068
420	147.620	186.020	267.685	99.522	138.762	72.125	179.416
480	159.443	200.914	289.048	106.592	148.621	75.117	193.695
540	171.249	215.782	310.327	113.071	157.654	77.860	207.905
600	183.035	230.623	331.524	118.957	165.861	80.355	222.046
660	194.803	245.437	352.638	124.252	173.243	82.601	236.118
720	206.553	260.225	373.668	128.954	179.799	84.599	250.121

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.001	0.000	0.001	0.000	0.000
50	0.000	0.000	0.001	0.000	0.001	0.000	0.000
60	0.000	0.000	0.001	0.000	0.001	0.001	0.000
120	0.001	0.001	0.002	0.001	0.001	0.001	0.001
180	0.001	0.001	0.002	0.001	0.001	0.001	0.001
240	0.001	0.001	0.002	0.001	0.001	0.001	0.001
300	0.001	0.002	0.002	0.001	0.002	0.001	0.002
360	0.001	0.002	0.003	0.001	0.002	0.001	0.002
420	0.001	0.002	0.003	0.001	0.002	0.001	0.002
480	0.002	0.002	0.003	0.001	0.002	0.001	0.002
540	0.002	0.002	0.003	0.001	0.002	0.001	0.002
600	0.002	0.002	0.003	0.001	0.002	0.001	0.002
660	0.002	0.002	0.004	0.001	0.002	0.001	0.002
720	0.002	0.003	0.004	0.001	0.002	0.001	0.002

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.001	0.001	0.001	0.000	0.001	0.005	0.001
10	0.001	0.002	0.002	0.001	0.001	0.005	0.002
20	0.002	0.004	0.004	0.001	0.002	0.004	0.003
30	0.003	0.006	0.005	0.002	0.003	0.003	0.004
40	0.004	0.008	0.007	0.002	0.004	0.003	0.006
50	0.005	0.010	0.009	0.003	0.005	0.002	0.007
60	0.005	0.012	0.010	0.003	0.005	0.002	0.008
120	0.009	0.019	0.017	0.005	0.007	0.005	0.013
180	0.010	0.021	0.019	0.005	0.008	0.007	0.015
240	0.011	0.023	0.020	0.005	0.008	0.008	0.016
300	0.012	0.025	0.022	0.005	0.008	0.010	0.017
360	0.012	0.027	0.023	0.005	0.008	0.011	0.018
420	0.013	0.028	0.024	0.005	0.009	0.012	0.019
480	0.014	0.029	0.025	0.005	0.009	0.013	0.020
540	0.014	0.030	0.026	0.006	0.009	0.014	0.020
600	0.014	0.030	0.026	0.006	0.009	0.014	0.021
660	0.014	0.031	0.026	0.006	0.010	0.015	0.021
720	0.014	0.031	0.026	0.006	0.010	0.015	0.021

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.023	0.043	0.032	0.003	0.042	0.146	0.030
10	0.043	0.079	0.060	0.006	0.077	0.272	0.056
20	0.073	0.135	0.103	0.010	0.132	0.474	0.096
30	0.094	0.174	0.133	0.013	0.169	0.622	0.124
40	0.102	0.189	0.145	0.014	0.183	0.681	0.135

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast
****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 5a: Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
70	0.030	0.064	0.063	0.002	0.003	0.400	0.055

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast
****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 5b: Multi-Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
70	0.003	0.005	0.004	0.000	0.001	0.038	0.004

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 6a: Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
70	0.014	0.041	0.042	0.001	0.001	0.129	0.029

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 6b: Multi-Day Resting Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
70	0.001	0.003	0.003	0.000	0.000	0.013	0.002

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.471	0.321	0.146	0.054	0.002	0.006	1.000
%TRIP	0.450	0.281	0.203	0.057	0.000	0.008	1.000
%VEH	0.494	0.312	0.138	0.029	0.001	0.027	1.000

Title : South Coast Air Basin Avg Winter CYr 2030 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2010/05/25 17:39:23
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected
Season : Winter
Area : South Coast

****

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter
Emfac2007 Emission Factors: V2.3 Nov 1 2006

South Coast Basin Average Basin Average

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.008	0.225	0.243	0.044	0.638	0.004	0.115
2	0.007	0.117	0.126	0.023	0.328	0.037	0.061
3	0.007	0.083	0.090	0.016	0.225	0.056	0.045
4	0.009	0.068	0.073	0.013	0.175	0.067	0.038
5	0.010	0.059	0.063	0.011	0.145	0.075	0.034
10	0.012	0.042	0.045	0.008	0.087	0.094	0.027
15	0.014	0.038	0.040	0.007	0.070	0.104	0.025
20	0.014	0.037	0.039	0.007	0.064	0.111	0.025
25	0.015	0.037	0.039	0.007	0.062	0.117	0.026
30	0.016	0.038	0.040	0.007	0.064	0.121	0.027
35	0.016	0.039	0.041	0.007	0.066	0.125	0.027
40	0.016	0.040	0.042	0.007	0.067	0.129	0.028
45	0.017	0.041	0.043	0.008	0.069	0.133	0.029
50	0.017	0.042	0.044	0.008	0.071	0.137	0.029
55	0.017	0.043	0.045	0.008	0.072	0.140	0.030
60	0.018	0.043	0.046	0.008	0.074	0.143	0.030

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:19:49

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: San Antonio and Foothill
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	571	0.9	0.0	24.4
2.	Y SB2	711	1201	745	1133	AG	445	1.8	0.0	24.4
3.	Y SB3	745	1133	800	1025	AG	559	0.9	0.0	24.4
4.	Y SB4	800	1025	858	906	AG	559	0.9	0.0	24.4
5.	Y NB1	868	911	813	1024	AG	847	0.9	0.0	24.4
6.	Y NB2	814	1024	761	1138	AG	685	1.8	0.0	24.4
7.	Y NB3	761	1138	728	1205	AG	835	0.9	0.0	24.4
8.	Y NB4	728	1205	700	1263	AG	835	0.9	0.0	24.4
9.	Y LT1	720	1198	753	1134	AG	126	1.8	0.0	24.4
10.	Y LT2	753	1134	802	1038	AG	162	1.8	0.0	24.4
11.	X EB1	596	1103	682	1125	AG	1773	0.9	0.0	30.5
12.	X EB2	682	1125	750	1141	AG	1623	1.8	0.0	30.5
13.	X EB3	750	1141	826	1158	AG	1749	0.9	0.0	30.5
14.	X EB4	826	1158	923	1182	AG	1749	0.9	0.0	30.5
15.	X WB1	924	1170	832	1147	AG	1397	0.9	0.0	30.5
16.	X WB2	832	1147	757	1128	AG	1283	1.8	0.0	30.5
17.	X WB3	757	1128	687	1111	AG	1445	0.9	0.0	30.5
18.	X WB4	687	1111	599	1090	AG	1445	0.9	0.0	30.5
19.	X LT1	674	1115	753	1134	AG	150	1.8	0.0	30.5
20.	X LT2	753	1134	841	1157	AG	114	1.8	0.0	30.5

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	301.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	109.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	52.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	230.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
4. Recpt 4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:19:49

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
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Run Began on 5/26/2010 at 8:21:58

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Euclid and Foothill
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 2.1 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	1056	0.9	0.0	48.8
2.	Y SB2	711	1201	745	1133	AG	856	1.8	0.0	48.8
3.	Y SB3	745	1133	800	1025	AG	1220	0.9	0.0	48.8
4.	Y SB4	800	1025	858	906	AG	1220	0.9	0.0	48.8
5.	Y NB1	868	911	813	1024	AG	1849	0.9	0.0	48.8
6.	Y NB2	814	1024	761	1138	AG	1333	1.8	0.0	48.8
7.	Y NB3	761	1138	728	1205	AG	1609	0.9	0.0	48.8
8.	Y NB4	728	1205	700	1263	AG	1609	0.9	0.0	48.8
9.	Y LT1	720	1198	753	1134	AG	200	1.8	0.0	48.8
10.	Y LT2	753	1134	802	1038	AG	516	1.8	0.0	48.8
11.	X EB1	596	1103	682	1125	AG	1817	0.9	0.0	30.5
12.	X EB2	682	1125	750	1141	AG	1541	1.8	0.0	30.5
13.	X EB3	750	1141	826	1158	AG	1741	0.9	0.0	30.5
14.	X EB4	826	1158	923	1182	AG	1741	0.9	0.0	30.5
15.	X WB1	924	1170	832	1147	AG	1369	0.9	0.0	30.5
16.	X WB2	832	1147	757	1128	AG	1005	1.8	0.0	30.5
17.	X WB3	757	1128	687	1111	AG	1521	0.9	0.0	30.5
18.	X WB4	687	1111	599	1090	AG	1521	0.9	0.0	30.5
19.	X LT1	674	1115	753	1134	AG	276	1.8	0.0	30.5
20.	X LT2	753	1134	841	1157	AG	364	1.8	0.0	30.5

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	303.	2.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2. Recpt 2	125.	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	51.	2.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
4. Recpt 4	176.	2.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:21:59

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:23:23

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Campus and Foothill
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	886	0.9	0.0	22.9
2.	Y SB2	711	1201	745	1133	AG	624	1.8	0.0	22.9
3.	Y SB3	745	1133	800	1025	AG	738	0.9	0.0	22.9
4.	Y SB4	800	1025	858	906	AG	738	0.9	0.0	22.9
5.	Y NB1	868	911	813	1024	AG	739	0.9	0.0	22.9
6.	Y NB2	814	1024	761	1138	AG	601	1.8	0.0	22.9
7.	Y NB3	761	1138	728	1205	AG	816	0.9	0.0	22.9
8.	Y NB4	728	1205	700	1263	AG	816	0.9	0.0	22.9
9.	Y LT1	720	1198	753	1134	AG	262	1.8	0.0	22.9
10.	Y LT2	753	1134	802	1038	AG	138	1.8	0.0	22.9
11.	X EB1	596	1103	682	1125	AG	1439	0.9	0.0	30.5
12.	X EB2	682	1125	750	1141	AG	1224	1.8	0.0	30.5
13.	X EB3	750	1141	826	1158	AG	1486	0.9	0.0	30.5
14.	X EB4	826	1158	923	1182	AG	1486	0.9	0.0	30.5
15.	X WB1	924	1170	832	1147	AG	1459	0.9	0.0	30.5
16.	X WB2	832	1147	757	1128	AG	1345	1.8	0.0	30.5
17.	X WB3	757	1128	687	1111	AG	1483	0.9	0.0	30.5
18.	X WB4	687	1111	599	1090	AG	1483	0.9	0.0	30.5
19.	X LT1	674	1115	753	1134	AG	215	1.8	0.0	30.5
20.	X LT2	753	1134	841	1157	AG	114	1.8	0.0	30.5

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	305.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	106.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	52.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	230.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
4. Recpt 4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:23:23

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:25:02

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Euclid and Arrow
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	1497	0.9	0.0	48.8
2.	Y SB2	711	1201	745	1133	AG	1422	1.8	0.0	48.8
3.	Y SB3	745	1133	800	1025	AG	1603	0.9	0.0	48.8
4.	Y SB4	800	1025	858	906	AG	1603	0.9	0.0	48.8
5.	Y NB1	868	911	813	1024	AG	2082	0.9	0.0	48.8
6.	Y NB2	814	1024	761	1138	AG	2018	1.8	0.0	48.8
7.	Y NB3	761	1138	728	1205	AG	2056	0.9	0.0	48.8
8.	Y NB4	728	1205	700	1263	AG	2056	0.9	0.0	48.8
9.	Y LT1	720	1198	753	1134	AG	75	1.8	0.0	48.8
10.	Y LT2	753	1134	802	1038	AG	64	1.8	0.0	48.8
11.	X EB1	596	1103	682	1125	AG	641	0.9	0.0	19.8
12.	X EB2	682	1125	750	1141	AG	603	1.8	0.0	19.8
13.	X EB3	750	1141	826	1158	AG	678	0.9	0.0	19.8
14.	X EB4	826	1158	923	1182	AG	678	0.9	0.0	19.8
15.	X WB1	924	1170	832	1147	AG	733	0.9	0.0	19.8
16.	X WB2	832	1147	757	1128	AG	552	1.8	0.0	19.8
17.	X WB3	757	1128	687	1111	AG	616	0.9	0.0	19.8
18.	X WB4	687	1111	599	1090	AG	616	0.9	0.0	19.8
19.	X LT1	674	1115	753	1134	AG	38	1.8	0.0	19.8
20.	X LT2	753	1134	841	1157	AG	181	1.8	0.0	19.8

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	310.	2.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2. Recpt 2	125.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3. Recpt 3	52.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
4. Recpt 4	176.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:25:02

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
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Run Began on 5/26/2010 at 8:26:24

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2nd and Arrow
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 2.1 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1. Y SB1	684	1256	711	1201	AG	114	0.9	0.0	19.8
2. Y SB2	711	1201	745	1133	AG	88	1.8	0.0	19.8
3. Y SB3	745	1133	800	1025	AG	127	0.9	0.0	19.8
4. Y SB4	800	1025	858	906	AG	127	0.9	0.0	19.8
5. Y NB1	868	911	813	1024	AG	226	0.9	0.0	19.8
6. Y NB2	814	1024	761	1138	AG	189	1.8	0.0	19.8
7. Y NB3	761	1138	728	1205	AG	215	0.9	0.0	19.8
8. Y NB4	728	1205	700	1263	AG	215	0.9	0.0	19.8
9. Y LT1	720	1198	753	1134	AG	26	1.8	0.0	19.8
10. Y LT2	753	1134	802	1038	AG	37	1.8	0.0	19.8
11. X EB1	596	1103	682	1125	AG	770	0.9	0.0	19.8
12. X EB2	682	1125	750	1141	AG	744	1.8	0.0	19.8
13. X EB3	750	1141	826	1158	AG	770	0.9	0.0	19.8
14. X EB4	826	1158	923	1182	AG	770	0.9	0.0	19.8
15. X WB1	924	1170	832	1147	AG	749	0.9	0.0	19.8
16. X WB2	832	1147	757	1128	AG	710	1.8	0.0	19.8
17. X WB3	757	1128	687	1111	AG	747	0.9	0.0	19.8
18. X WB4	687	1111	599	1090	AG	747	0.9	0.0	19.8
19. X LT1	674	1115	753	1134	AG	26	1.8	0.0	19.8
20. X LT2	753	1134	841	1157	AG	39	1.8	0.0	19.8

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	805	1099	1.8
2. Recpt 2	691	1157	1.8
3. Recpt 3	729	1093	1.8
4. Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	302.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	112.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	52.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	229.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:26:24

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:33:10

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Campus and Arrow
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	511	0.9	0.0	22.9
2.	Y SB2	711	1201	745	1133	AG	441	1.8	0.0	22.9
3.	Y SB3	745	1133	800	1025	AG	539	0.9	0.0	22.9
4.	Y SB4	800	1025	858	906	AG	539	0.9	0.0	22.9
5.	Y NB1	868	911	813	1024	AG	557	0.9	0.0	22.9
6.	Y NB2	814	1024	761	1138	AG	506	1.8	0.0	22.9
7.	Y NB3	761	1138	728	1205	AG	606	0.9	0.0	22.9
8.	Y NB4	728	1205	700	1263	AG	606	0.9	0.0	22.9
9.	Y LT1	720	1198	753	1134	AG	70	1.8	0.0	22.9
10.	Y LT2	753	1134	802	1038	AG	51	1.8	0.0	22.9
11.	X EB1	596	1103	682	1125	AG	763	0.9	0.0	19.8
12.	X EB2	682	1125	750	1141	AG	663	1.8	0.0	19.8
13.	X EB3	750	1141	826	1158	AG	733	0.9	0.0	19.8
14.	X EB4	826	1158	923	1182	AG	733	0.9	0.0	19.8
15.	X WB1	924	1170	832	1147	AG	798	0.9	0.0	19.8
16.	X WB2	832	1147	757	1128	AG	700	1.8	0.0	19.8
17.	X WB3	757	1128	687	1111	AG	751	0.9	0.0	19.8
18.	X WB4	687	1111	599	1090	AG	751	0.9	0.0	19.8
19.	X LT1	674	1115	753	1134	AG	100	1.8	0.0	19.8
20.	X LT2	753	1134	841	1157	AG	98	1.8	0.0	19.8

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	302.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	108.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	51.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	179.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:33:10

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:35:11

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Grove and Arrow
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 2.1 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	653	0.9	0.0	24.4
2.	Y SB2	711	1201	745	1133	AG	539	1.8	0.0	24.4
3.	Y SB3	745	1133	800	1025	AG	639	0.9	0.0	24.4
4.	Y SB4	800	1025	858	906	AG	639	0.9	0.0	24.4
5.	Y NB1	868	911	813	1024	AG	804	0.9	0.0	24.4
6.	Y NB2	814	1024	761	1138	AG	766	1.8	0.0	24.4
7.	Y NB3	761	1138	728	1205	AG	791	0.9	0.0	24.4
8.	Y NB4	728	1205	700	1263	AG	791	0.9	0.0	24.4
9.	Y LT1	720	1198	753	1134	AG	114	1.8	0.0	24.4
10.	Y LT2	753	1134	802	1038	AG	38	1.8	0.0	24.4
11.	X EB1	596	1103	682	1125	AG	464	0.9	0.0	19.8
12.	X EB2	682	1125	750	1141	AG	439	1.8	0.0	19.8
13.	X EB3	750	1141	826	1158	AG	553	0.9	0.0	19.8
14.	X EB4	826	1158	923	1182	AG	553	0.9	0.0	19.8
15.	X WB1	924	1170	832	1147	AG	545	0.9	0.0	19.8
16.	X WB2	832	1147	757	1128	AG	445	1.8	0.0	19.8
17.	X WB3	757	1128	687	1111	AG	483	0.9	0.0	19.8
18.	X WB4	687	1111	599	1090	AG	483	0.9	0.0	19.8
19.	X LT1	674	1115	753	1134	AG	25	1.8	0.0	19.8
20.	X LT2	753	1134	841	1157	AG	100	1.8	0.0	19.8

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	306.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	108.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	52.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	178.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:35:11

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:37:03

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2nd and 8th
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	139	0.9	0.0	18.3
2.	Y SB2	711	1201	745	1133	AG	88	1.8	0.0	18.3
3.	Y SB3	745	1133	800	1025	AG	127	0.9	0.0	18.3
4.	Y SB4	800	1025	858	906	AG	127	0.9	0.0	18.3
5.	Y NB1	868	911	813	1024	AG	283	0.9	0.0	18.3
6.	Y NB2	814	1024	761	1138	AG	200	1.8	0.0	18.3
7.	Y NB3	761	1138	728	1205	AG	276	0.9	0.0	18.3
8.	Y NB4	728	1205	700	1263	AG	276	0.9	0.0	18.3
9.	Y LT1	720	1198	753	1134	AG	51	1.8	0.0	18.3
10.	Y LT2	753	1134	802	1038	AG	83	1.8	0.0	18.3
11.	X EB1	596	1103	682	1125	AG	492	0.9	0.0	18.3
12.	X EB2	682	1125	750	1141	AG	416	1.8	0.0	18.3
13.	X EB3	750	1141	826	1158	AG	467	0.9	0.0	18.3
14.	X EB4	826	1158	923	1182	AG	467	0.9	0.0	18.3
15.	X WB1	924	1170	832	1147	AG	366	0.9	0.0	18.3
16.	X WB2	832	1147	757	1128	AG	327	1.8	0.0	18.3
17.	X WB3	757	1128	687	1111	AG	410	0.9	0.0	18.3
18.	X WB4	687	1111	599	1090	AG	410	0.9	0.0	18.3
19.	X LT1	674	1115	753	1134	AG	76	1.8	0.0	18.3
20.	X LT2	753	1134	841	1157	AG	39	1.8	0.0	18.3

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	293.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	118.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	51.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	229.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:37:03

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:38:19

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Campus and 8th
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	616	0.9	0.0	22.9
2.	Y SB2	711	1201	745	1133	AG	527	1.8	0.0	22.9
3.	Y SB3	745	1133	800	1025	AG	554	0.9	0.0	22.9
4.	Y SB4	800	1025	858	906	AG	554	0.9	0.0	22.9
5.	Y NB1	868	911	813	1024	AG	428	0.9	0.0	22.9
6.	Y NB2	814	1024	761	1138	AG	391	1.8	0.0	22.9
7.	Y NB3	761	1138	728	1205	AG	541	0.9	0.0	22.9
8.	Y NB4	728	1205	700	1263	AG	541	0.9	0.0	22.9
9.	Y LT1	720	1198	753	1134	AG	89	1.8	0.0	22.9
10.	Y LT2	753	1134	802	1038	AG	37	1.8	0.0	22.9
11.	X EB1	596	1103	682	1125	AG	552	0.9	0.0	18.3
12.	X EB2	682	1125	750	1141	AG	402	1.8	0.0	18.3
13.	X EB3	750	1141	826	1158	AG	491	0.9	0.0	18.3
14.	X EB4	826	1158	923	1182	AG	491	0.9	0.0	18.3
15.	X WB1	924	1170	832	1147	AG	389	0.9	0.0	18.3
16.	X WB2	832	1147	757	1128	AG	362	1.8	0.0	18.3
17.	X WB3	757	1128	687	1111	AG	399	0.9	0.0	18.3
18.	X WB4	687	1111	599	1090	AG	399	0.9	0.0	18.3
19.	X LT1	674	1115	753	1134	AG	150	1.8	0.0	18.3
20.	X LT2	753	1134	841	1157	AG	27	1.8	0.0	18.3

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	304.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	109.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	4.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	230.	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:38:19

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:40:05

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Euclid and 7th
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	20. DEGREES	TEMP=	15.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Y SB1	684	1256	711	1201	AG	1838	0.9	0.0	48.8
2.	Y SB2	711	1201	745	1133	AG	1816	1.8	0.0	48.8
3.	Y SB3	745	1133	800	1025	AG	1843	0.9	0.0	48.8
4.	Y SB4	800	1025	858	906	AG	1843	0.9	0.0	48.8
5.	Y NB1	868	911	813	1024	AG	1808	0.9	0.0	48.8
6.	Y NB2	814	1024	761	1138	AG	1759	1.8	0.0	48.8
7.	Y NB3	761	1138	728	1205	AG	1784	0.9	0.0	48.8
8.	Y NB4	728	1205	700	1263	AG	1784	0.9	0.0	48.8
9.	Y LT1	720	1198	753	1134	AG	22	1.8	0.0	48.8
10.	Y LT2	753	1134	802	1038	AG	49	1.8	0.0	48.8
11.	X EB1	596	1103	682	1125	AG	238	0.9	0.0	18.3
12.	X EB2	682	1125	750	1141	AG	213	1.8	0.0	18.3
13.	X EB3	750	1141	826	1158	AG	235	0.9	0.0	18.3
14.	X EB4	826	1158	923	1182	AG	235	0.9	0.0	18.3
15.	X WB1	924	1170	832	1147	AG	683	0.9	0.0	18.3
16.	X WB2	832	1147	757	1128	AG	656	1.8	0.0	18.3
17.	X WB3	757	1128	687	1111	AG	705	0.9	0.0	18.3
18.	X WB4	687	1111	599	1090	AG	705	0.9	0.0	18.3
19.	X LT1	674	1115	753	1134	AG	25	1.8	0.0	18.3
20.	X LT2	753	1134	841	1157	AG	27	1.8	0.0	18.3

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	805	1099	1.8
2.	Recpt 2	691	1157	1.8
3.	Recpt 3	729	1093	1.8
4.	Recpt 4	778	1179	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1. Recpt 1	311.	2.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
2. Recpt 2	125.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3. Recpt 3	51.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
4. Recpt 4	176.	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 9	10	11	12	13	14	15	16
1. Recpt 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RECEPTOR	CONC/LINK (PPM) 17	18	19	20
1. Recpt 1	0.0	0.0	0.0	0.0
2. Recpt 2	0.0	0.0	0.0	0.0
3. Recpt 3	0.0	0.0	0.0	0.0
4. Recpt 4	0.0	0.0	0.0	0.0

1

Run Ended on 5/26/2010 at 8:40:05

1 CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 5/26/2010 at 8:44:08

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Euclid and I-10 EB ramps
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	0.0 CM/S		
CLAS=	7 (G)	VS=	0.0 CM/S		
MIXH=	1000. M	AMB=	2.1 PPM		
SIGTH=	5. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
1.	Link A	6284	-181	6284	-246	AG	1713	0.9	0.0	48.8
2.	Link B	6284	-246	6284	-300	AG	592	1.8	0.0	48.8
3.	Link C	6284	-300	6279	-453	AG	592	0.9	0.0	48.8
4.	Link D	6297	-460	6298	-378	AG	1282	0.9	0.0	48.8
5.	Link E	6298	-378	6298	-319	AG	1282	0.9	0.0	48.8
6.	Link F	6298	-319	6297	-176	AG	1282	0.9	0.0	48.8
7.	Link G	6284	-265	6300	-314	AG	1121	1.8	0.0	48.8
8.	Link H	6300	-314	6462	-325	AG	1121	0.9	0.0	12.2
9.	Link I	6523	-313	6380	-311	AG	1863	0.9	0.0	12.2
10.	Link J	6380	-311	6298	-301	AG	1863	1.8	0.0	12.2
11.	Link K	6370	-310	6284	-326	AG	0	1.8	0.0	12.2

III. RECEPTOR LOCATIONS

	RECEPTOR	COORDINATES (M) X	Y	Z
1.	Recpt 1	6325	-280	1.7
2.	Recpt 2	6315	-339	1.7
3.	Recpt 3	6243	-327	1.7
4.	Recpt 4	6246	-277	1.7

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

	RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) 1	2	3	4	5	6	7	8
1.	Recpt 1	201.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.	Recpt 2	348.	2.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3.	Recpt 3	83.	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
4.	Recpt 4	107.	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

RECEPTOR	*CONC/LINK (PPM) 9	10	11
1. Recpt 1	0.0	0.1	0.0
2. Recpt 2	0.0	0.1	0.0
3. Recpt 3	0.0	0.1	0.0
4. Recpt 4	0.0	0.2	0.0

1

Run Ended on 5/26/2010 at 8:44:08

APPENDIX E
Noise Data

Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	38,264
Peak Hour Traffic:	**3826.4**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

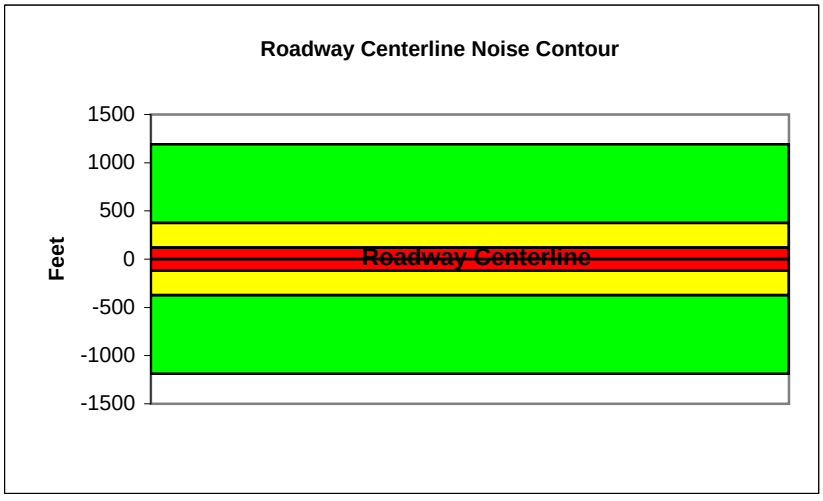
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.0	66.8	65.0	58.9	67.6	68.2
Medium Trucks:	66.3	58.2	51.9	50.3	58.8	59.0
Heavy Trucks:	70.8	58.9	49.8	51.1	60.6	60.7
Vehicle Noise:	**73.2**	**68.1**	**65.4**	**60.2**	**68.8**	**69.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1190
65 dBA	376
70 dBA	119
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	38,366
Peak Hour Traffic:	**3836.6**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

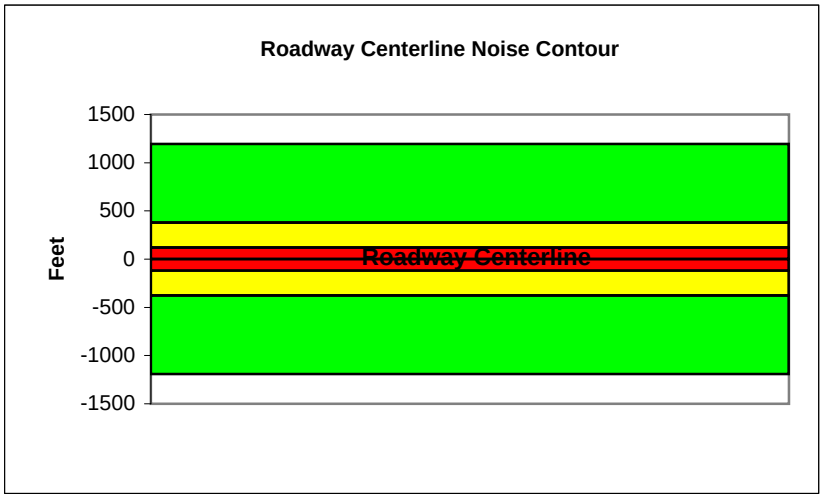
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.1	66.8	65.0	59.0	67.6	68.2
Medium Trucks:	66.3	58.3	51.9	50.3	58.8	59.0
Heavy Trucks:	70.8	58.9	49.9	51.1	60.6	60.7
Vehicle Noise:	**73.2**	**68.1**	**65.4**	**60.3**	**68.9**	**69.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1193
65 dBA	377
70 dBA	119
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 9th Street and Arrow Highway		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	38,366
Peak Hour Traffic:	**3836.6**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

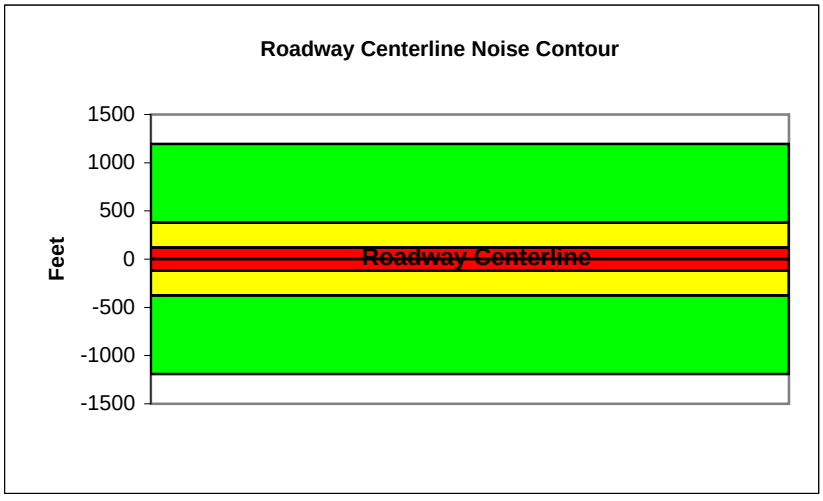
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.1	66.8	65.0	59.0	67.6	68.2
Medium Trucks:	66.3	58.3	51.9	50.3	58.8	59.0
Heavy Trucks:	70.8	58.9	49.9	51.1	60.6	60.7
Vehicle Noise:	**73.2**	**68.1**	**65.4**	**60.3**	**68.9**	**69.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1193
65 dBA	377
70 dBA	119
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between Arrow Highway and Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	32,271
Peak Hour Traffic:	**3227.1**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

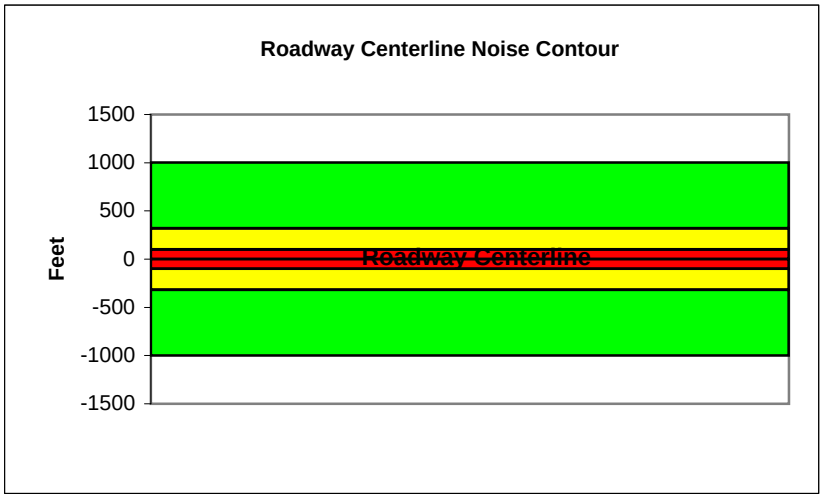
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.3	66.1	64.3	58.2	66.9	67.5
Medium Trucks:	65.6	57.5	51.1	49.6	58.0	58.3
Heavy Trucks:	70.1	58.2	49.1	50.3	59.9	60.0
Vehicle Noise:	**72.4**	**67.4**	**64.7**	**59.5**	**68.1**	**68.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1004
65 dBA	317
70 dBA	100
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	23,118
Peak Hour Traffic:	**2311.8**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

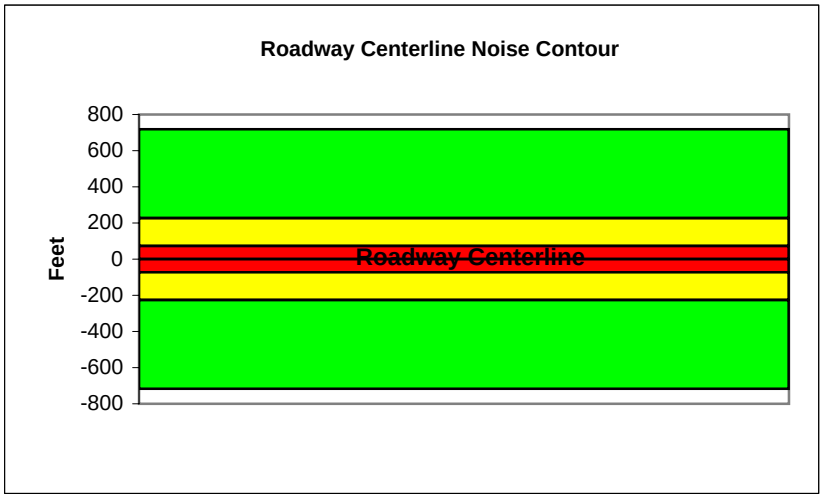
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.9	64.6	62.8	56.8	65.4	66.0
Medium Trucks:	64.1	56.1	49.7	48.1	56.6	56.8
Heavy Trucks:	68.6	56.7	47.7	48.9	58.4	58.5
Vehicle Noise:	**71.0**	**65.9**	**63.2**	**58.1**	**66.7**	**67.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	719
65 dBA	227
70 dBA	72
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	8,338
Peak Hour Traffic:	**833.8**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

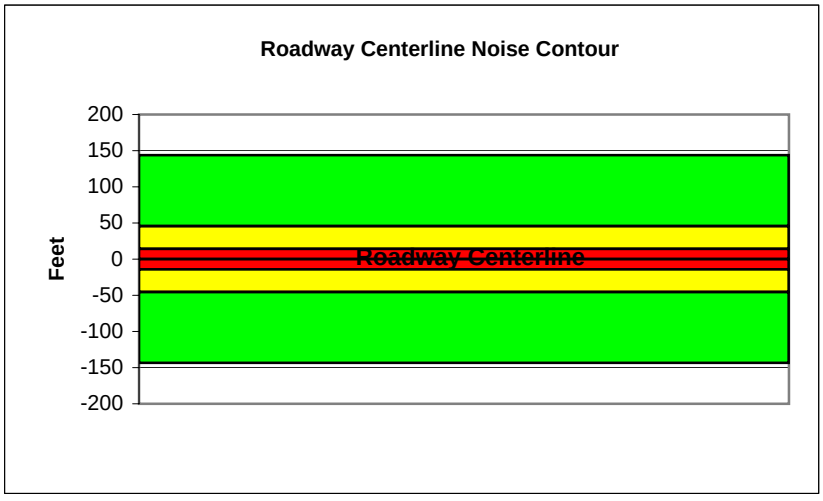
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.2	57.9	56.2	50.1	58.7	59.3
Medium Trucks:	58.9	50.8	44.4	42.9	51.3	51.6
Heavy Trucks:	64.1	52.2	43.1	44.3	54.2	54.4
Vehicle Noise:	**66.5**	**59.9**	**56.7**	**52.0**	**60.6**	**61.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	144
65 dBA	45
70 dBA	14
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	10,187
Peak Hour Traffic:	**1018.7**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

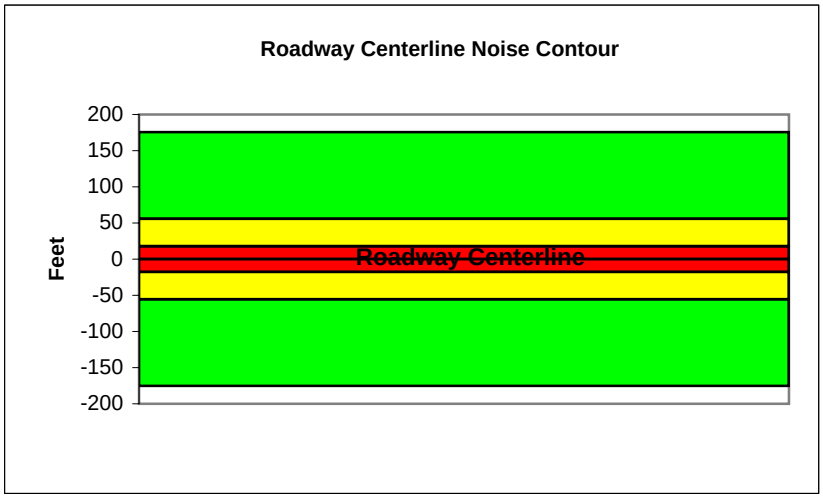
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.0	58.8	57.0	50.9	59.6	60.2
Medium Trucks:	59.7	51.7	45.3	43.7	52.2	52.4
Heavy Trucks:	65.0	53.0	44.0	45.2	55.1	55.2
Vehicle Noise:	**67.4**	**60.8**	**57.6**	**52.9**	**61.5**	**61.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	176
65 dBA	56
70 dBA	18
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 9th Street and Arrow Hwy		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	10,187
Peak Hour Traffic:	**1018.7**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

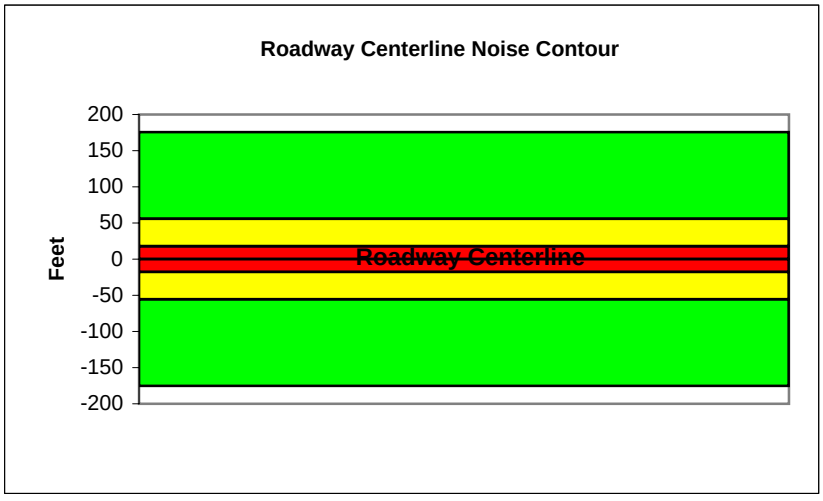
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.0	58.8	57.0	50.9	59.6	60.2
Medium Trucks:	59.7	51.7	45.3	43.7	52.2	52.4
Heavy Trucks:	65.0	53.0	44.0	45.2	55.1	55.2
Vehicle Noise:	**67.4**	**60.8**	**57.6**	**52.9**	**61.5**	**61.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	176
65 dBA	56
70 dBA	18
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between Arrow Hwy and Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	13,609
Peak Hour Traffic:	**1360.9**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

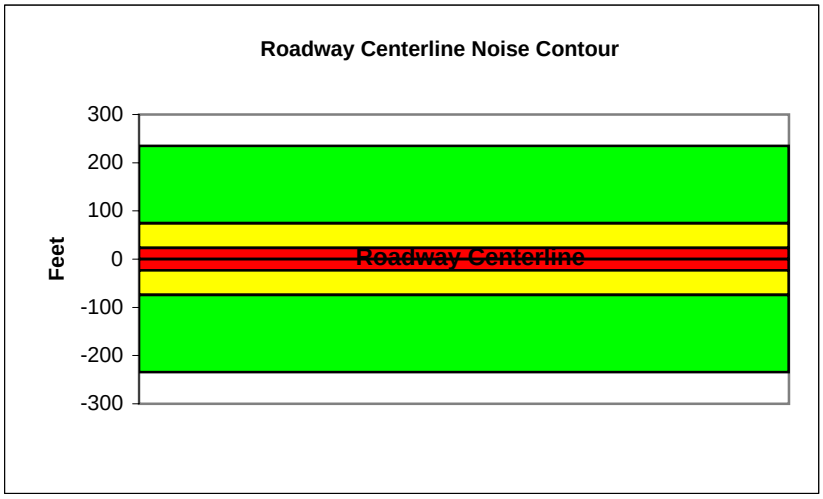
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.3	60.1	58.3	52.2	60.8	61.5
Medium Trucks:	61.0	52.9	46.6	45.0	53.5	53.7
Heavy Trucks:	66.2	54.3	45.2	46.4	56.4	56.5
Vehicle Noise:	**68.7**	**62.0**	**58.8**	**54.1**	**62.7**	**63.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	235
65 dBA	74
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	21,769
Peak Hour Traffic:	**2176.9**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

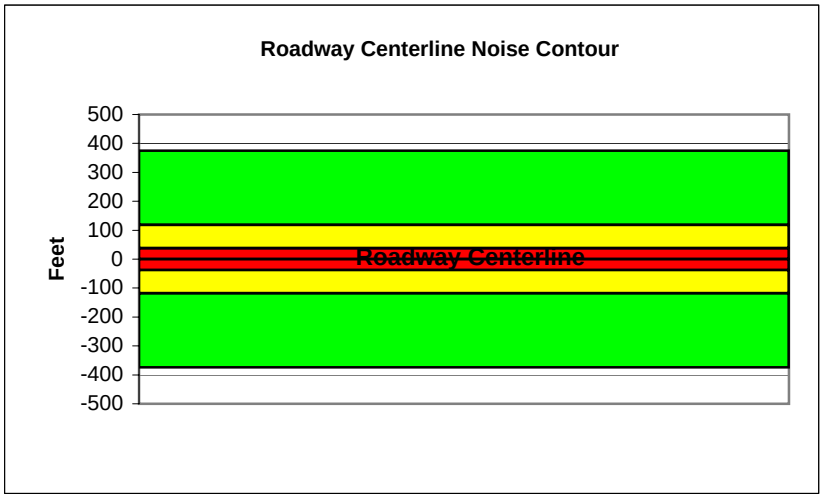
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	53.3	62.1	60.3	54.2	62.9	63.5
Medium Trucks:	63.0	55.0	48.6	47.0	55.5	55.7
Heavy Trucks:	68.3	56.3	47.3	48.5	58.4	58.5
Vehicle Noise:	**70.7**	**64.1**	**60.9**	**56.2**	**64.8**	**65.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	376
65 dBA	119
70 dBA	38
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	3,900
Peak Hour Traffic:	**390**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

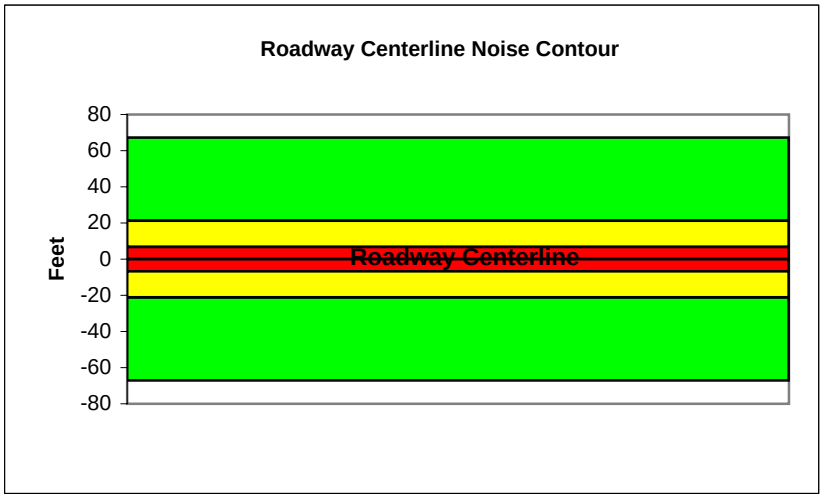
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	45.9	54.7	52.9	46.8	55.5	56.1
Medium Trucks:	55.6	47.6	41.2	39.6	48.1	48.3
Heavy Trucks:	60.9	48.9	39.9	41.1	51.0	51.1
Vehicle Noise:	**63.3**	**56.7**	**53.5**	**48.8**	**57.4**	**57.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	67
65 dBA	21
70 dBA	7
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	4,873
Peak Hour Traffic:	**487.3**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

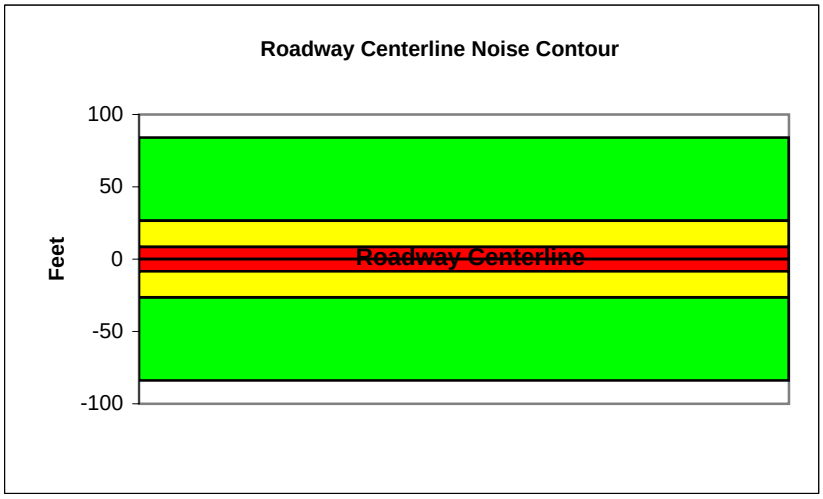
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.9	55.7	53.9	47.8	56.5	57.1
Medium Trucks:	56.6	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	61.8	49.9	40.8	42.1	52.0	52.1
Vehicle Noise:	**64.3**	**57.6**	**54.4**	**49.8**	**58.3**	**58.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	84
65 dBA	27
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	7,991
Peak Hour Traffic:	**799.1**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

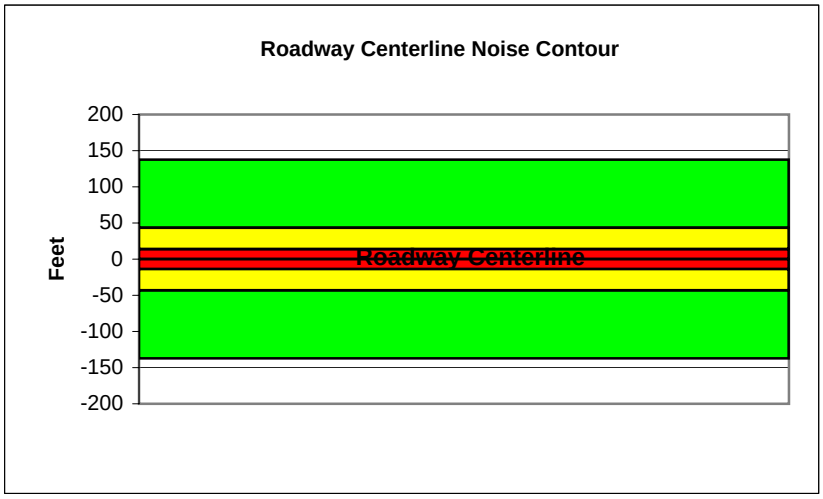
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.0	57.8	56.0	50.0	58.6	59.2
Medium Trucks:	58.8	50.7	44.3	42.7	51.2	51.5
Heavy Trucks:	64.0	52.0	43.0	44.2	54.1	54.2
Vehicle Noise:	**66.4**	**59.8**	**56.6**	**51.9**	**60.5**	**60.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	138
65 dBA	44
70 dBA	14
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	Euclid Ave to Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,830
Peak Hour Traffic:	**683**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

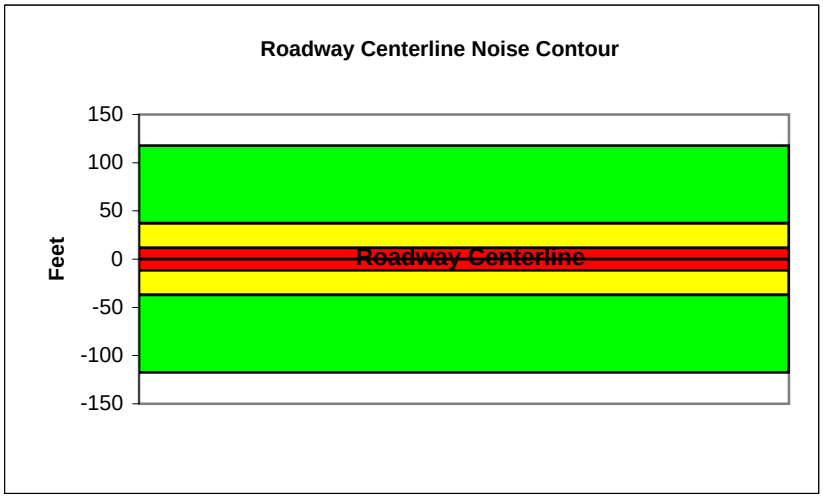
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.4	57.1	55.4	49.3	57.9	58.5
Medium Trucks:	58.1	50.0	43.6	42.1	50.5	50.8
Heavy Trucks:	63.3	51.4	42.3	43.5	53.4	53.6
Vehicle Noise:	**65.7**	**59.1**	**55.9**	**51.2**	**59.8**	**60.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	118
65 dBA	37
70 dBA	12
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	East of Campus Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	4,382
Peak Hour Traffic:	**438.2**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

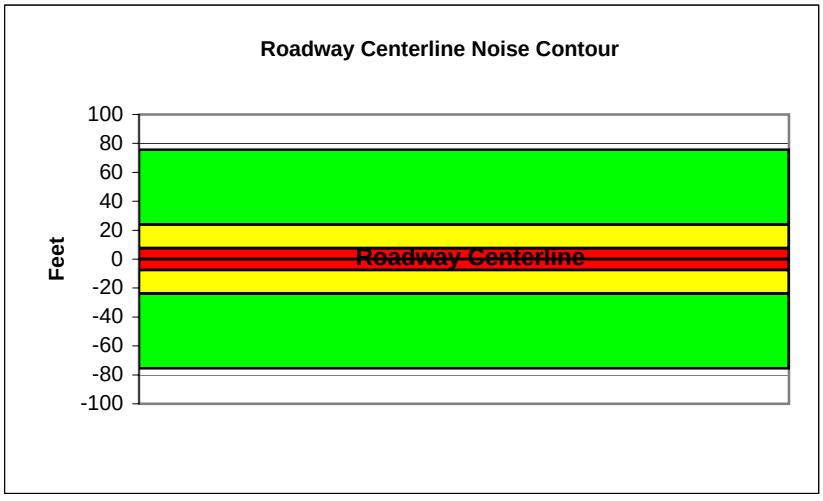
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.4	55.2	53.4	47.3	56.0	56.6
Medium Trucks:	56.2	48.1	41.7	40.1	48.6	48.8
Heavy Trucks:	61.4	49.4	40.4	41.6	51.5	51.6
Vehicle Noise:	**63.8**	**57.2**	**54.0**	**49.3**	**57.9**	**58.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	76
65 dBA	24
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	5,027
Peak Hour Traffic:	**502.7**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

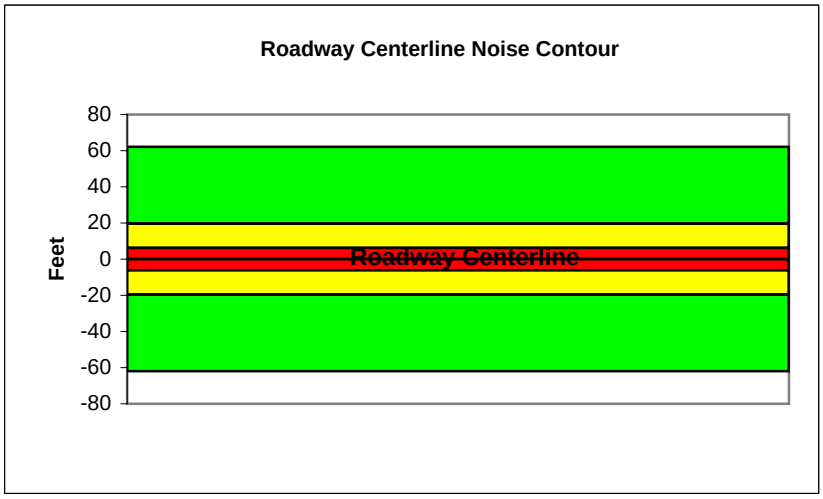
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	45.0	53.8	52.0	45.9	54.6	55.2
Medium Trucks:	55.6	47.5	41.2	39.6	48.1	48.3
Heavy Trucks:	61.2	49.3	40.3	41.5	51.6	51.7
Vehicle Noise:	**63.8**	**56.3**	**52.7**	**48.4**	**56.9**	**57.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	62
65 dBA	20
70 dBA	6
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	5,036
Peak Hour Traffic:	**503.6**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

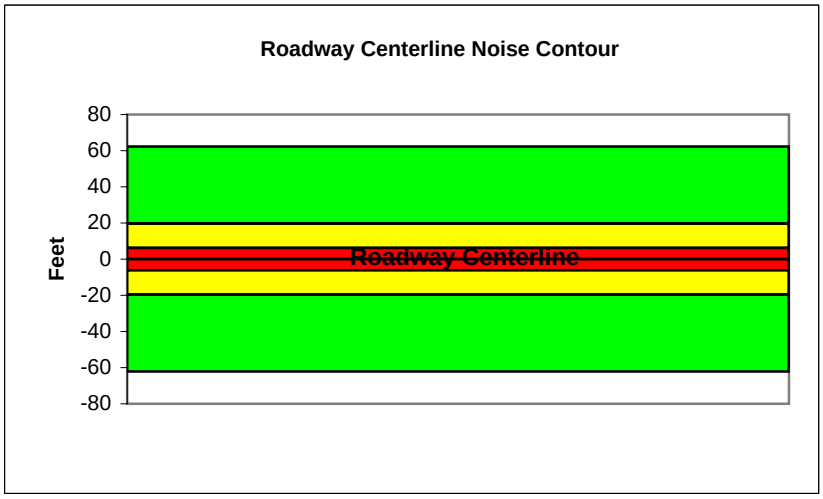
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	45.0	53.8	52.0	45.9	54.6	55.2
Medium Trucks:	55.6	47.5	41.2	39.6	48.1	48.3
Heavy Trucks:	61.3	49.3	40.3	41.5	51.6	51.7
Vehicle Noise:	**63.8**	**56.3**	**52.7**	**48.4**	**56.9**	**57.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	62
65 dBA	20
70 dBA	6
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	West of Euclid		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	10,271
Peak Hour Traffic:	**1027.1**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

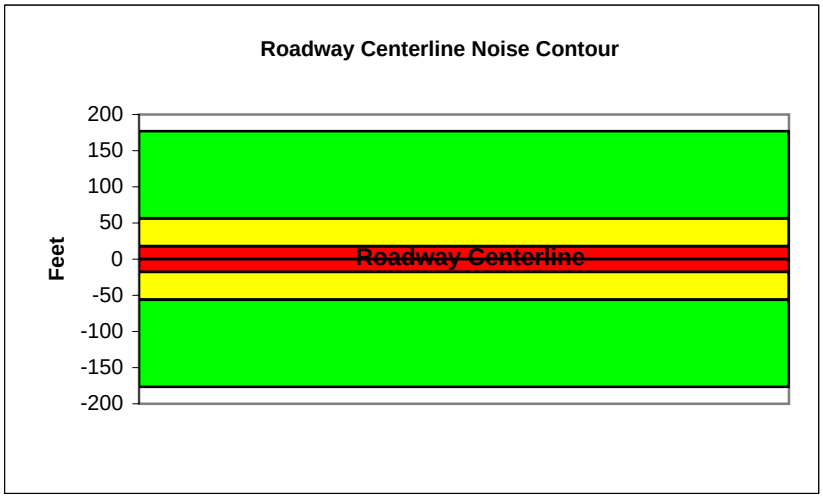
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.0	58.8	57.0	50.9	59.6	60.2
Medium Trucks:	59.7	51.7	45.3	43.7	52.2	52.4
Heavy Trucks:	65.0	53.0	44.0	45.2	55.1	55.2
Vehicle Noise:	**67.4**	**60.8**	**57.6**	**52.9**	**61.5**	**61.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	177
65 dBA	56
70 dBA	18
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	Euclid to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	12,708
Peak Hour Traffic:	**1270.8**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

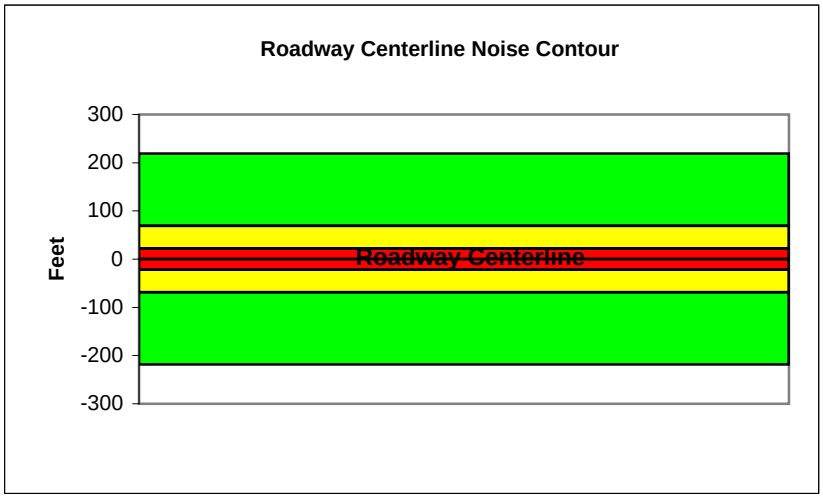
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.0	59.7	57.9	51.9	60.5	61.1
Medium Trucks:	60.7	52.6	46.2	44.7	53.1	53.4
Heavy Trucks:	65.9	54.0	44.9	46.1	56.0	56.2
Vehicle Noise:	**68.3**	**61.7**	**58.5**	**53.8**	**62.4**	**62.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	219
65 dBA	69
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	East of Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	13,236
Peak Hour Traffic:	**1323.6**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

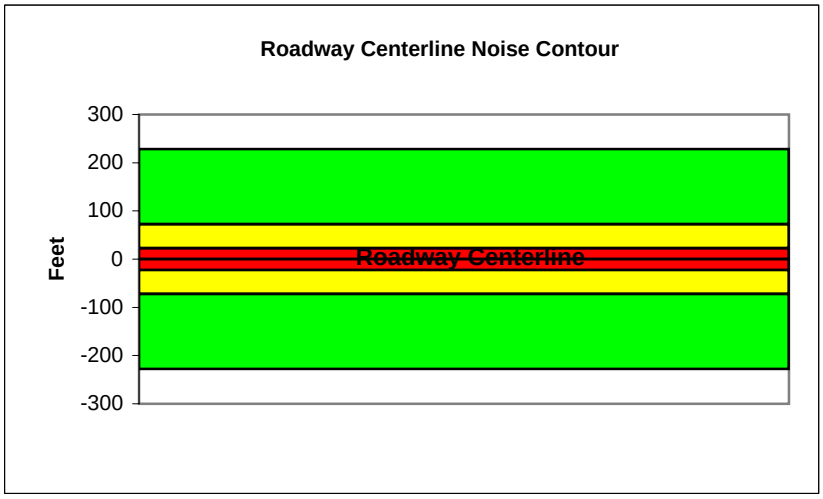
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.1	59.9	58.1	52.0	60.7	61.3
Medium Trucks:	60.9	52.8	46.4	44.8	53.3	53.5
Heavy Trucks:	66.1	54.1	45.1	46.3	56.2	56.3
Vehicle Noise:	**68.5**	**61.9**	**58.7**	**54.0**	**62.6**	**63.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	228
65 dBA	72
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	West of Euclid		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	28,742
Peak Hour Traffic:	**2874.2**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

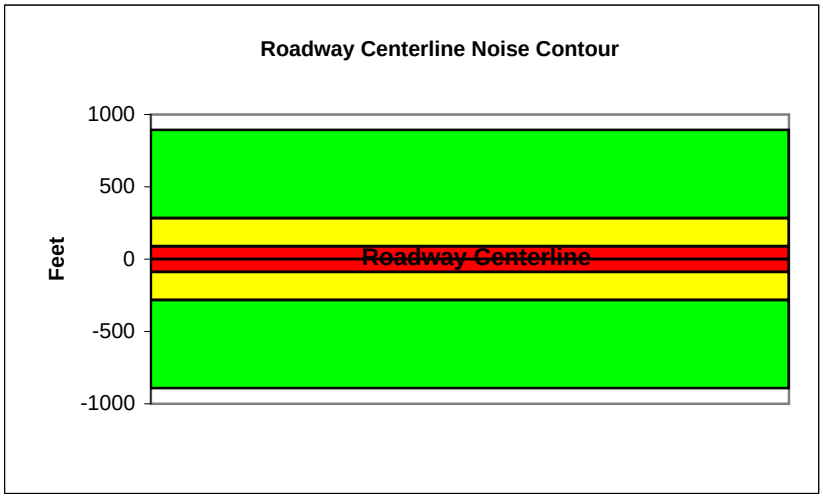
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.3	66.1	64.3	58.2	66.9	67.5
Medium Trucks:	65.6	57.5	51.2	49.6	58.1	58.3
Heavy Trucks:	70.1	58.2	49.1	50.4	59.9	60.0
Vehicle Noise:	**72.5**	**67.4**	**64.7**	**59.5**	**68.1**	**68.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	893
65 dBA	283
70 dBA	89
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	Euclid to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	25,404
Peak Hour Traffic:	**2540.4**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

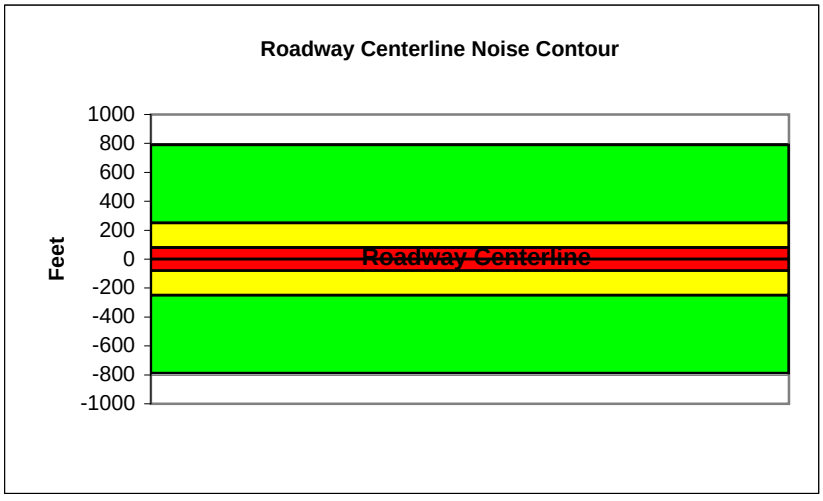
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	56.8	65.6	63.8	57.7	66.4	67.0
Medium Trucks:	65.1	57.0	50.6	49.1	57.5	57.8
Heavy Trucks:	69.6	57.7	48.6	49.8	59.4	59.5
Vehicle Noise:	**71.9**	**66.9**	**64.2**	**59.0**	**67.6**	**68.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	789
65 dBA	249
70 dBA	79
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	East of Campus Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	26,494
Peak Hour Traffic:	**2649.4**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

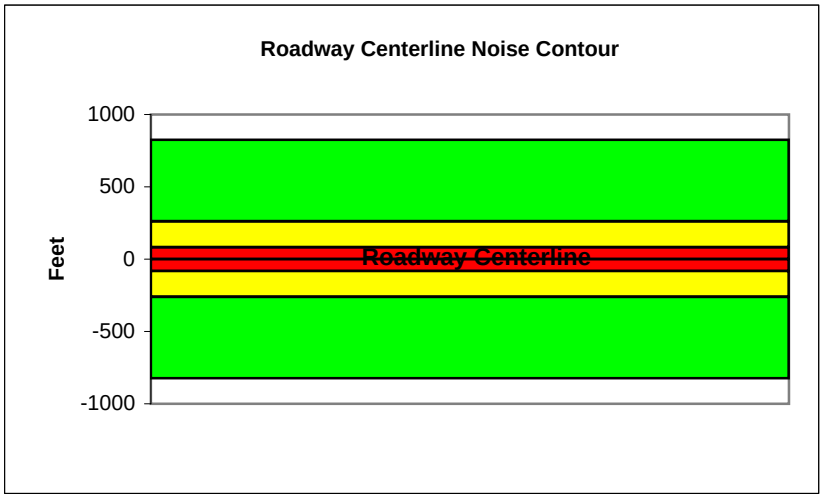
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.0	65.8	64.0	57.9	66.5	67.1
Medium Trucks:	65.3	57.2	50.8	49.2	57.7	58.0
Heavy Trucks:	69.8	57.8	48.8	50.0	59.5	59.7
Vehicle Noise:	**72.1**	**67.1**	**64.3**	**59.2**	**67.8**	**68.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	824
65 dBA	261
70 dBA	82
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	48,148
Peak Hour Traffic:	**4814.8**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

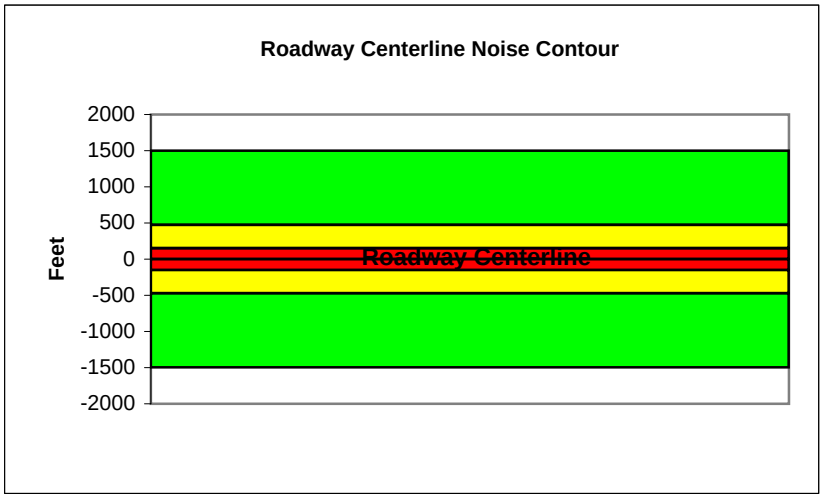
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.0	67.8	66.0	59.9	68.6	69.2
Medium Trucks:	67.3	59.2	52.9	51.3	59.8	60.0
Heavy Trucks:	71.8	59.9	50.8	52.1	61.6	61.7
Vehicle Noise:	**74.2**	**69.1**	**66.4**	**61.2**	**69.8**	**70.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1499
65 dBA	474
70 dBA	150
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	48,276
Peak Hour Traffic:	**4827.6**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

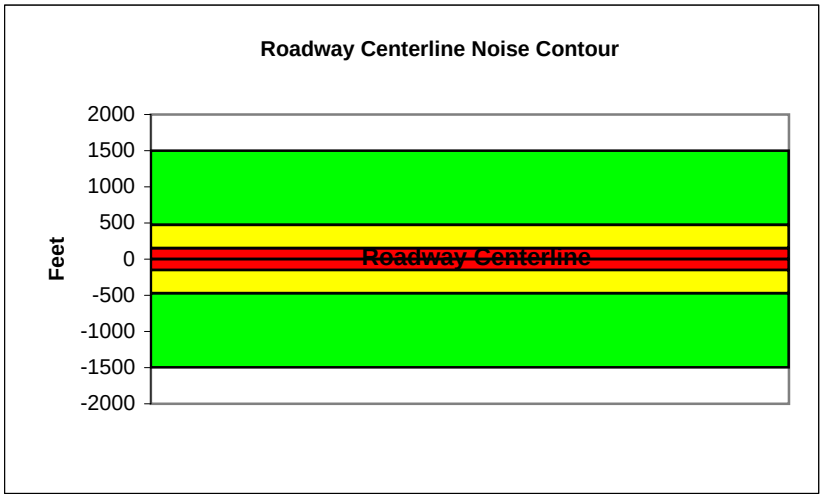
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.0	67.8	66.0	60.0	68.6	69.2
Medium Trucks:	67.3	59.3	52.9	51.3	59.8	60.0
Heavy Trucks:	71.8	59.9	50.9	52.1	61.6	61.7
Vehicle Noise:	**74.2**	**69.1**	**66.4**	**61.3**	**69.9**	**70.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1502
65 dBA	475
70 dBA	150
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 9th Street and Arrow Highway		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	48,276
Peak Hour Traffic:	**4827.6**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

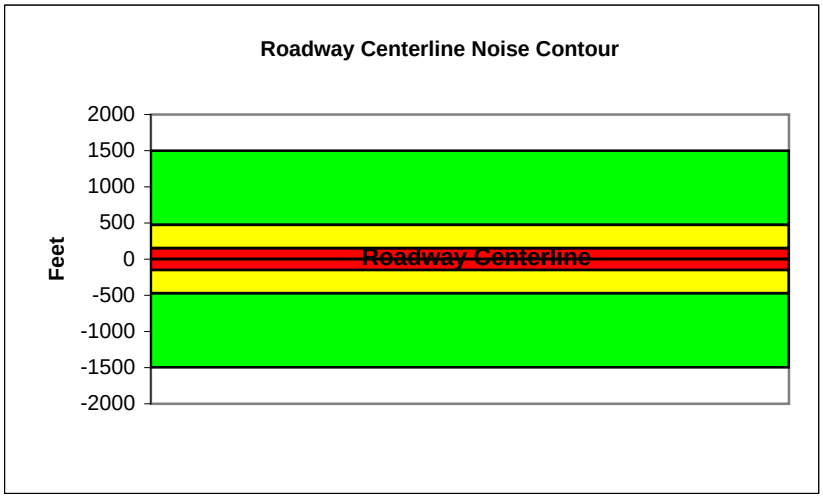
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.0	67.8	66.0	60.0	68.6	69.2
Medium Trucks:	67.3	59.3	52.9	51.3	59.8	60.0
Heavy Trucks:	71.8	59.9	50.9	52.1	61.6	61.7
Vehicle Noise:	**74.2**	**69.1**	**66.4**	**61.3**	**69.9**	**70.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1502
65 dBA	475
70 dBA	150
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between Arrow Highway and Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	40,597
Peak Hour Traffic:	**4059.7**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

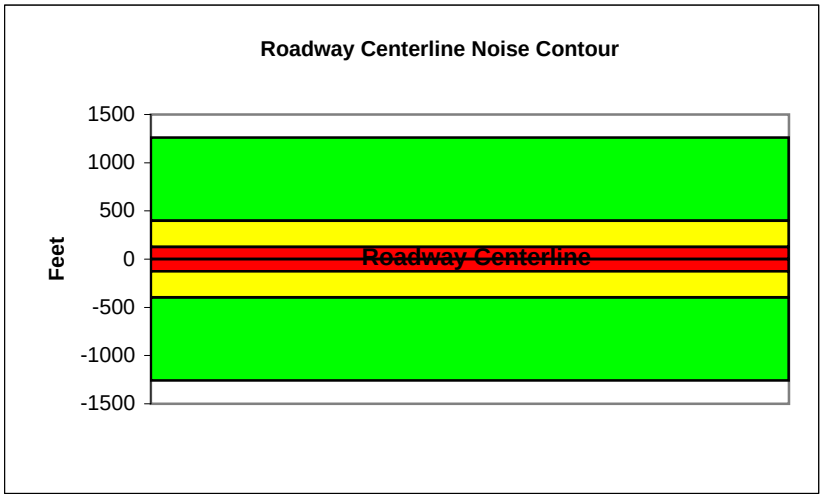
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.3	67.1	65.3	59.2	67.9	68.5
Medium Trucks:	66.6	58.5	52.1	50.6	59.0	59.3
Heavy Trucks:	71.1	59.2	50.1	51.3	60.9	61.0
Vehicle Noise:	**73.4**	**68.4**	**65.7**	**60.5**	**69.1**	**69.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1261
65 dBA	399
70 dBA	126
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	29,082
Peak Hour Traffic:	**2908.2**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

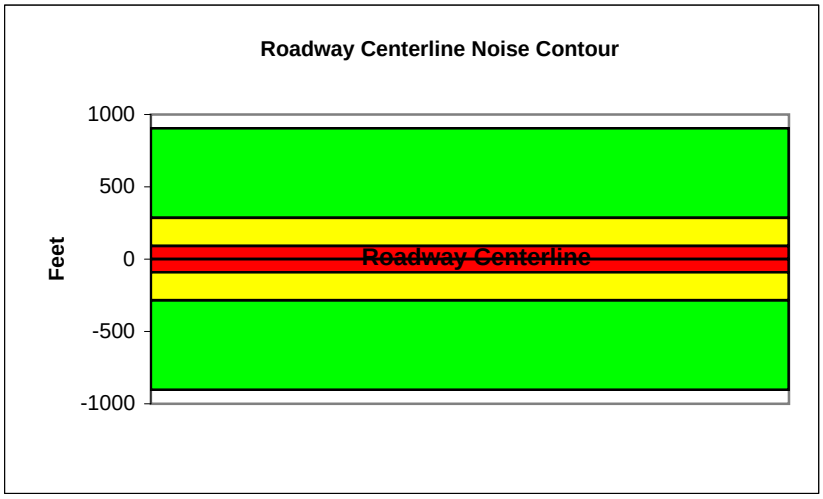
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	56.8	65.6	63.8	57.8	66.4	67.0
Medium Trucks:	65.1	57.1	50.7	49.1	57.6	57.8
Heavy Trucks:	69.6	57.7	48.7	49.9	59.4	59.5
Vehicle Noise:	**72.0**	**66.9**	**64.2**	**59.1**	**67.6**	**68.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	905
65 dBA	286
70 dBA	90
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	10,492
Peak Hour Traffic:	**1049.2**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

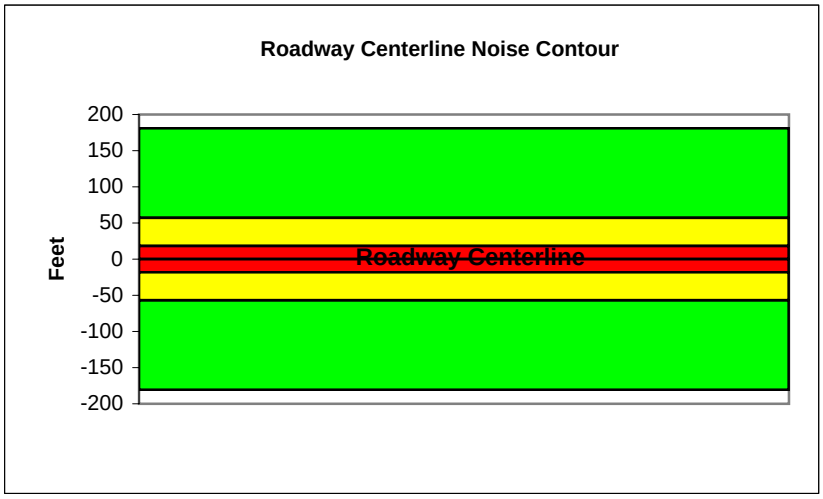
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.2	58.9	57.1	51.1	59.7	60.3
Medium Trucks:	59.9	51.8	45.4	43.9	52.3	52.6
Heavy Trucks:	65.1	53.2	44.1	45.3	55.2	55.4
Vehicle Noise:	**67.5**	**60.9**	**57.7**	**53.0**	**61.6**	**62.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	181
65 dBA	57
70 dBA	18
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	12,818
Peak Hour Traffic:	**1281.8**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

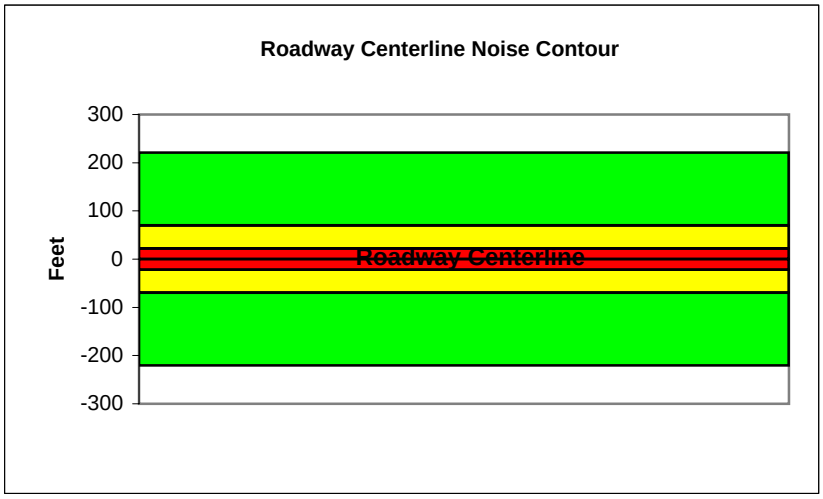
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.0	59.8	58.0	51.9	60.6	61.2
Medium Trucks:	60.7	52.7	46.3	44.7	53.2	53.4
Heavy Trucks:	66.0	54.0	45.0	46.2	56.1	56.2
Vehicle Noise:	**68.4**	**61.8**	**58.6**	**53.9**	**62.5**	**62.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	221
65 dBA	70
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 9th Street and Arrow Hwy		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	12,818
Peak Hour Traffic:	**1281.8**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

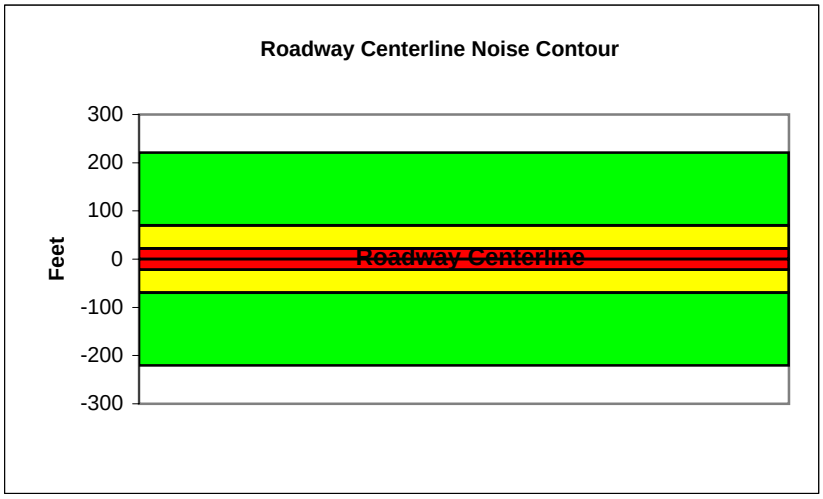
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.0	59.8	58.0	51.9	60.6	61.2
Medium Trucks:	60.7	52.7	46.3	44.7	53.2	53.4
Heavy Trucks:	66.0	54.0	45.0	46.2	56.1	56.2
Vehicle Noise:	**68.4**	**61.8**	**58.6**	**53.9**	**62.5**	**62.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	221
65 dBA	70
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between Arrow Hwy and Foothill Blvd		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	17,120
Peak Hour Traffic:	**1712**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

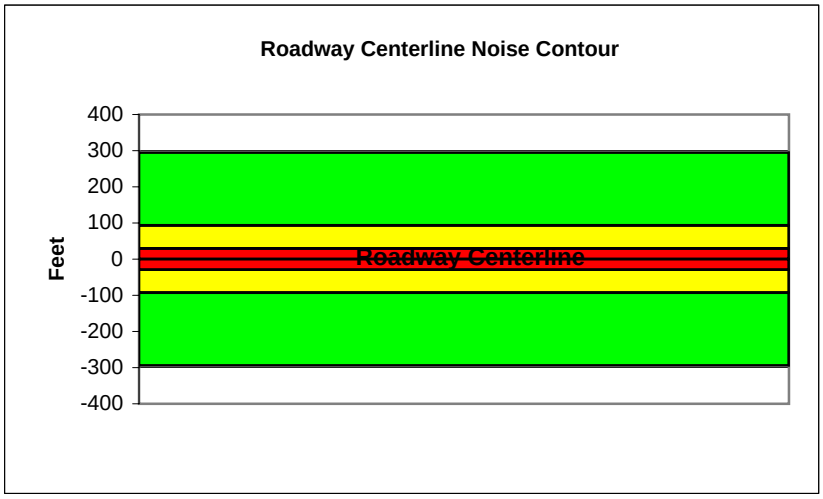
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.3	61.1	59.3	53.2	61.8	62.4
Medium Trucks:	62.0	53.9	47.6	46.0	54.5	54.7
Heavy Trucks:	67.2	55.3	46.2	47.4	57.4	57.5
Vehicle Noise:	**69.7**	**63.0**	**59.8**	**55.1**	**63.7**	**64.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	295
65 dBA	93
70 dBA	29
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	27,385
Peak Hour Traffic:	**2738.5**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

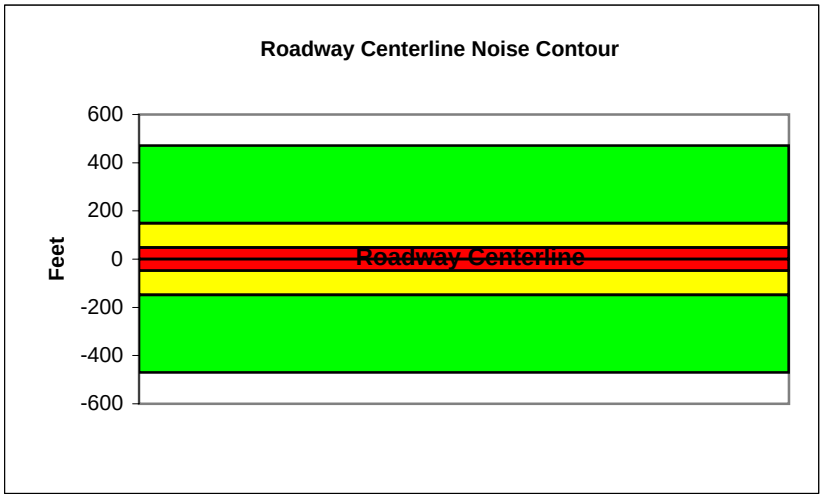
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	54.3	63.1	61.3	55.2	63.9	64.5
Medium Trucks:	64.0	56.0	49.6	48.0	56.5	56.7
Heavy Trucks:	69.3	57.3	48.3	49.5	59.4	59.5
Vehicle Noise:	**71.7**	**65.1**	**61.9**	**57.2**	**65.8**	**66.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	472
65 dBA	149
70 dBA	47
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	4,906
Peak Hour Traffic:	**490.6**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

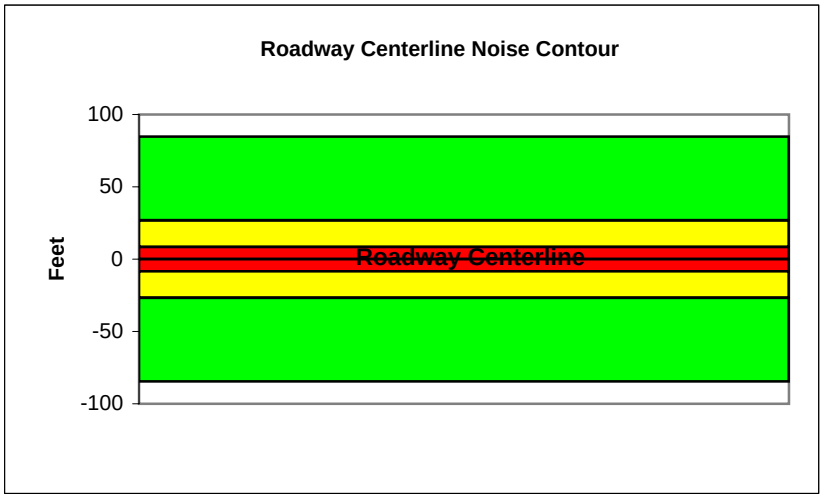
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.9	55.7	53.9	47.8	56.5	57.1
Medium Trucks:	56.6	48.6	42.2	40.6	49.1	49.3
Heavy Trucks:	61.9	49.9	40.9	42.1	52.0	52.1
Vehicle Noise:	**64.3**	**57.7**	**54.5**	**49.8**	**58.4**	**58.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	85
65 dBA	27
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,130
Peak Hour Traffic:	**613**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

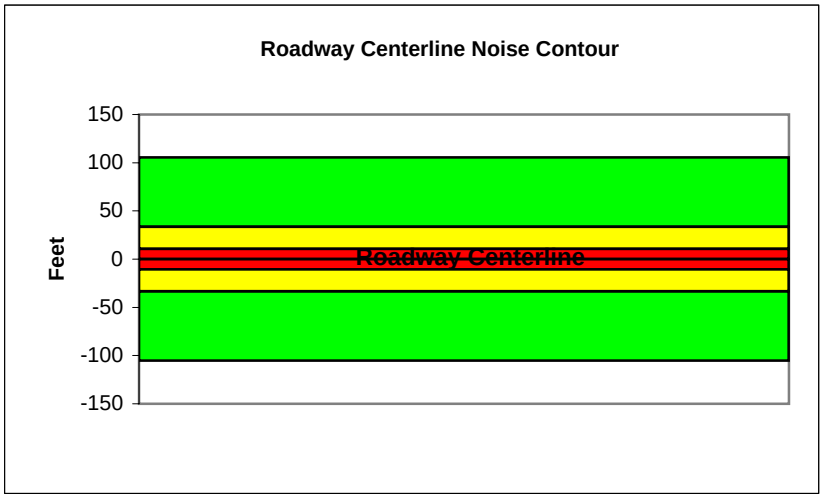
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.9	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	57.6	49.5	43.2	41.6	50.1	50.3
Heavy Trucks:	62.8	50.9	41.8	43.1	53.0	53.1
Vehicle Noise:	**65.3**	**58.6**	**55.4**	**50.8**	**59.3**	**59.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	106
65 dBA	33
70 dBA	11
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	10,053
Peak Hour Traffic:	**1005.3**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

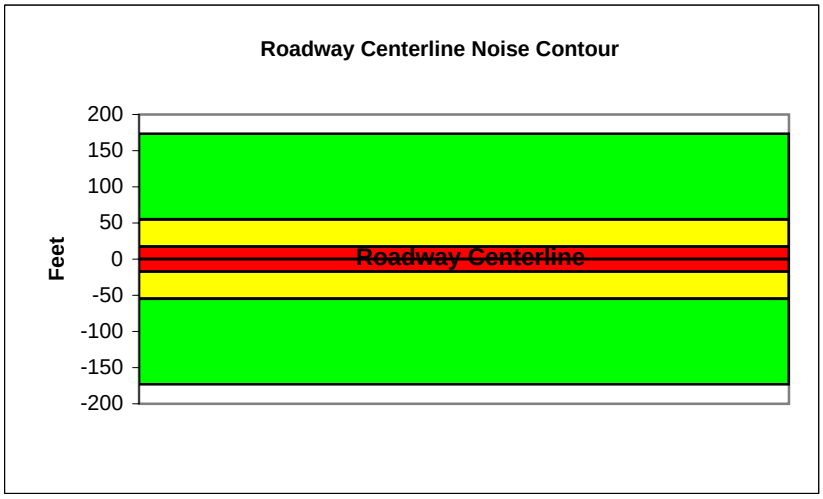
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.0	58.8	57.0	50.9	59.6	60.2
Medium Trucks:	59.8	51.7	45.3	43.7	52.2	52.5
Heavy Trucks:	65.0	53.0	44.0	45.2	55.1	55.2
Vehicle Noise:	**67.4**	**60.8**	**57.6**	**52.9**	**61.5**	**61.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	173
65 dBA	55
70 dBA	17
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	Euclid Ave to Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	8,592
Peak Hour Traffic:	**859.2**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

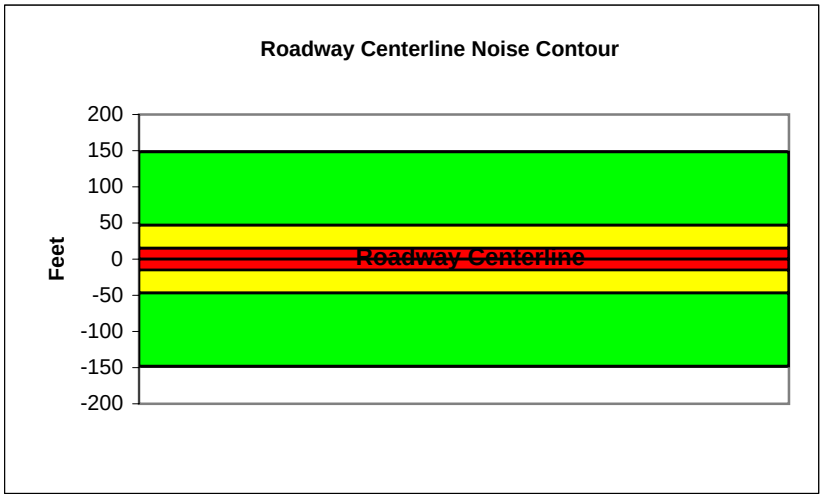
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.4	58.1	56.4	50.3	58.9	59.5
Medium Trucks:	59.1	51.0	44.6	43.1	51.5	51.8
Heavy Trucks:	64.3	52.4	43.3	44.5	54.4	54.6
Vehicle Noise:	**66.7**	**60.1**	**56.9**	**52.2**	**60.8**	**61.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	148
65 dBA	47
70 dBA	15
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	East of Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	5,513
Peak Hour Traffic:	**551.3**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

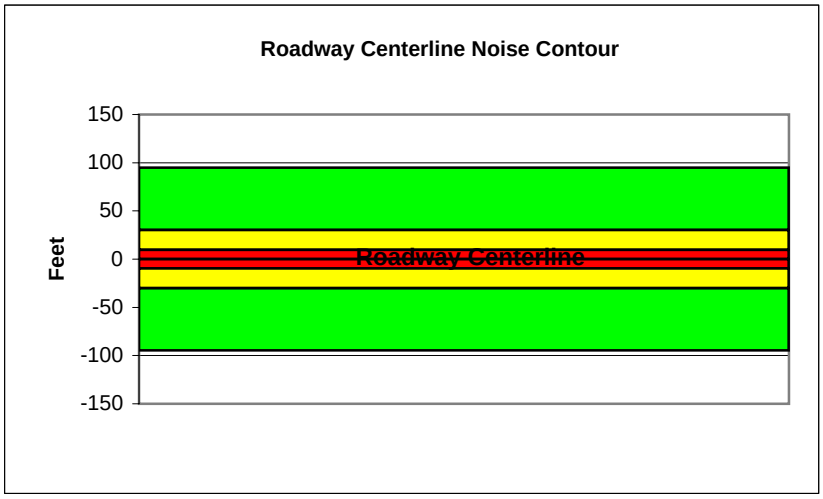
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.4	56.2	54.4	48.3	57.0	57.6
Medium Trucks:	57.1	49.1	42.7	41.1	49.6	49.8
Heavy Trucks:	62.4	50.4	41.4	42.6	52.5	52.6
Vehicle Noise:	**64.8**	**58.2**	**55.0**	**50.3**	**58.9**	**59.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	95
65 dBA	30
70 dBA	10
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	6,324
Peak Hour Traffic:	**632.4**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

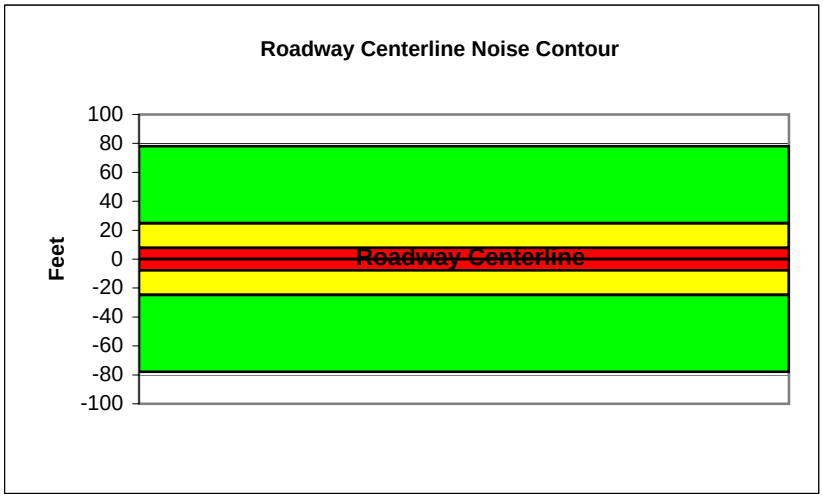
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.0	54.8	53.0	46.9	55.6	56.2
Medium Trucks:	56.6	48.5	42.1	40.6	49.1	49.3
Heavy Trucks:	62.2	50.3	41.3	42.5	52.6	52.7
Vehicle Noise:	**64.8**	**57.3**	**53.7**	**49.4**	**57.9**	**58.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	78
65 dBA	25
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,335
Peak Hour Traffic:	**633.5**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

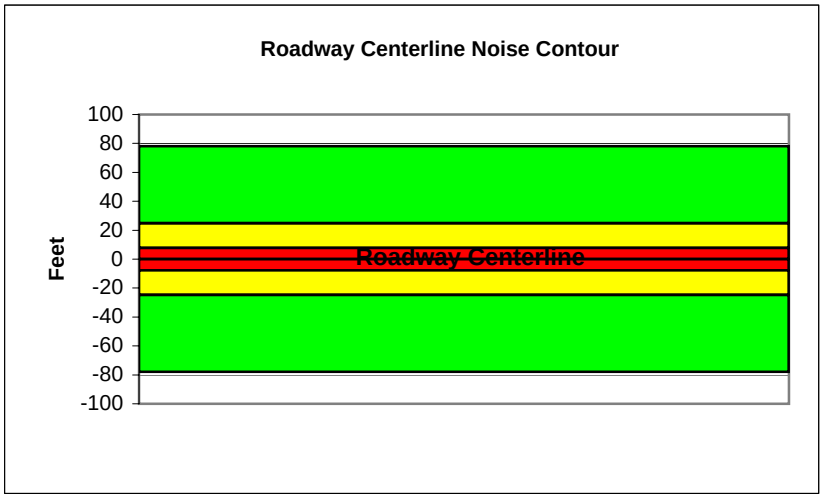
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.0	54.8	53.0	46.9	55.6	56.2
Medium Trucks:	56.6	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	62.3	50.3	41.3	42.5	52.6	52.7
Vehicle Noise:	**64.8**	**57.3**	**53.7**	**49.4**	**57.9**	**58.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	78
65 dBA	25
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	West of Euclid		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	12,921
Peak Hour Traffic:	**1292.1**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

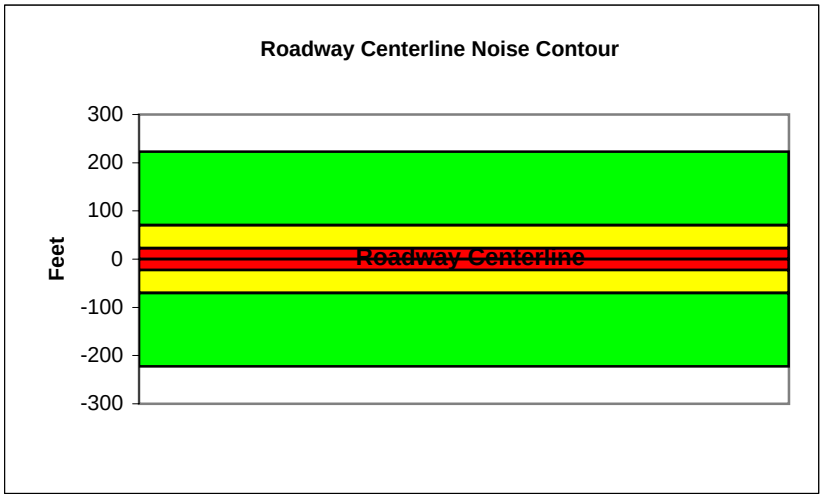
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.0	59.8	58.0	51.9	60.6	61.2
Medium Trucks:	60.7	52.7	46.3	44.7	53.2	53.4
Heavy Trucks:	66.0	54.0	45.0	46.2	56.1	56.2
Vehicle Noise:	**68.4**	**61.8**	**58.6**	**53.9**	**62.5**	**62.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	223
65 dBA	70
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	Euclid to Campus		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	15,987
Peak Hour Traffic:	**1598.7**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

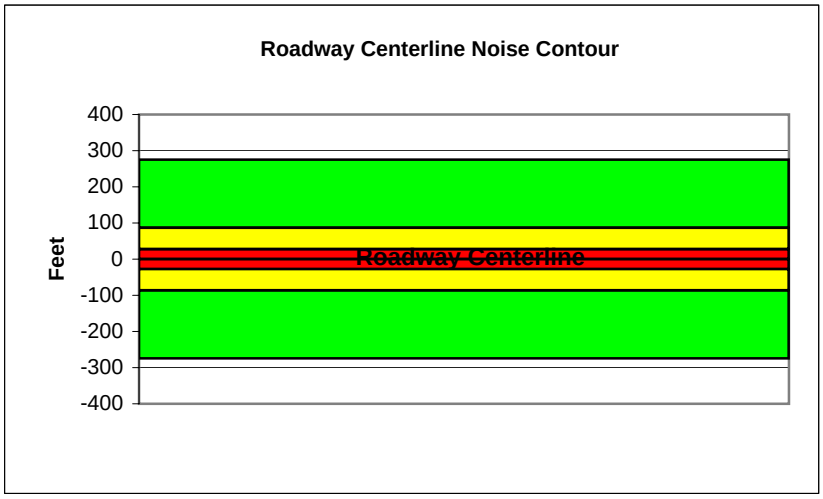
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.0	60.7	58.9	52.9	61.5	62.1
Medium Trucks:	61.7	53.6	47.2	45.6	54.1	54.4
Heavy Trucks:	66.9	55.0	45.9	47.1	57.0	57.1
Vehicle Noise:	**69.3**	**62.7**	**59.5**	**54.8**	**63.4**	**63.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	275
65 dBA	87
70 dBA	28
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	East of Campus		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	16,651
Peak Hour Traffic:	**1665.1**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

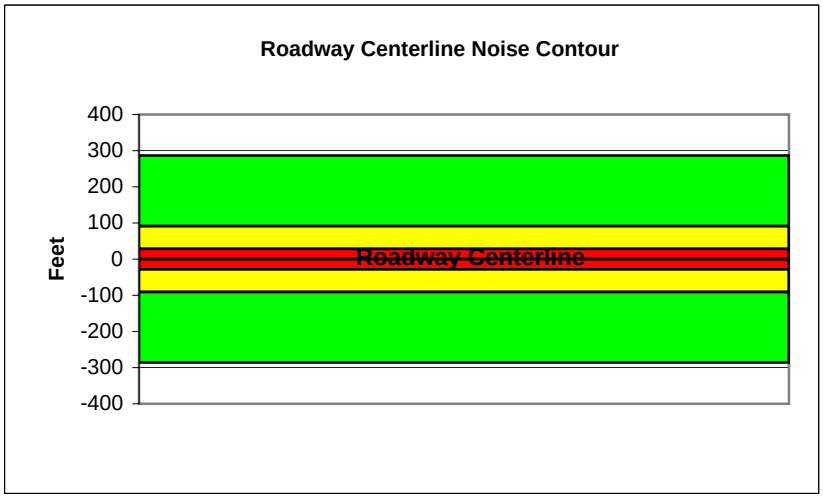
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.1	60.9	59.1	53.0	61.7	62.3
Medium Trucks:	61.8	53.8	47.4	45.8	54.3	54.5
Heavy Trucks:	67.1	55.1	46.1	47.3	57.2	57.3
Vehicle Noise:	**69.5**	**62.9**	**59.7**	**55.0**	**63.6**	**64.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	287
65 dBA	91
70 dBA	29
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	West of Euclid		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	36,157
Peak Hour Traffic:	**3615.7**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

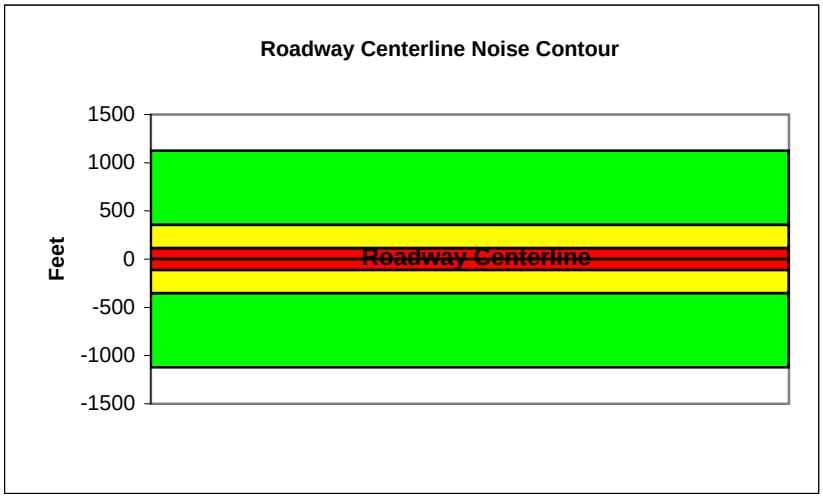
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.3	67.1	65.3	59.2	67.9	68.5
Medium Trucks:	66.6	58.5	52.2	50.6	59.1	59.3
Heavy Trucks:	71.1	59.2	50.1	51.4	60.9	61.0
Vehicle Noise:	**73.5**	**68.4**	**65.7**	**60.5**	**69.1**	**69.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1125
65 dBA	356
70 dBA	112
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	Euclid to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	31,958
Peak Hour Traffic:	**3195.8**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

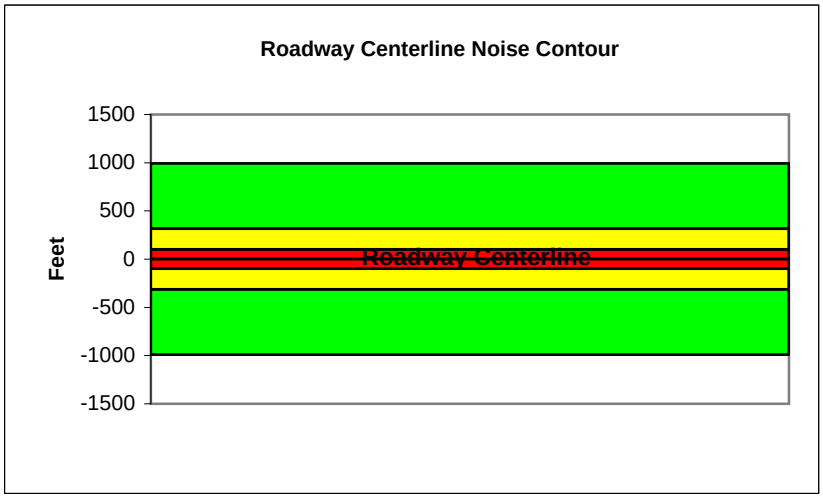
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.8	66.6	64.8	58.7	67.4	68.0
Medium Trucks:	66.1	58.0	51.6	50.0	58.5	58.8
Heavy Trucks:	70.6	58.7	49.6	50.8	60.4	60.5
Vehicle Noise:	**72.9**	**67.9**	**65.2**	**60.0**	**68.6**	**69.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	993
65 dBA	314
70 dBA	99
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	East of Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	33,329
Peak Hour Traffic:	**3332.9**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

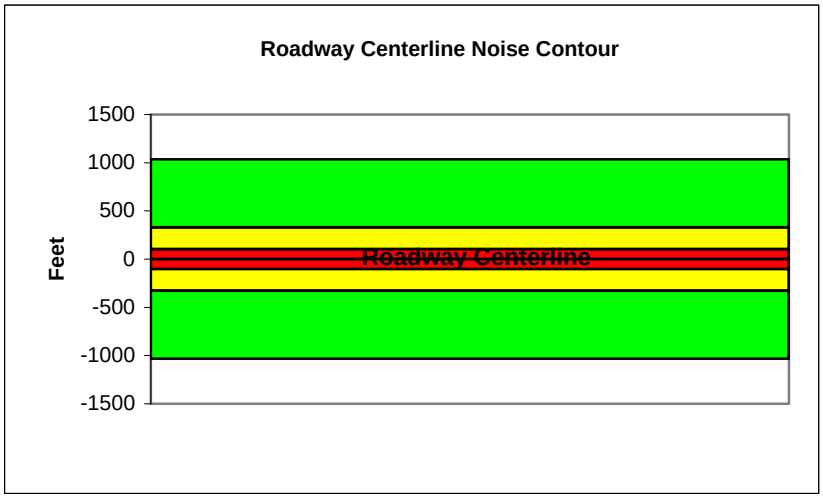
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.0	66.8	65.0	58.9	67.5	68.1
Medium Trucks:	66.3	58.2	51.8	50.2	58.7	59.0
Heavy Trucks:	70.8	58.8	49.8	51.0	60.5	60.7
Vehicle Noise:	**73.1**	**68.1**	**65.3**	**60.2**	**68.8**	**69.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1035
65 dBA	327
70 dBA	104
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	48,604
Peak Hour Traffic:	**4860.4**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

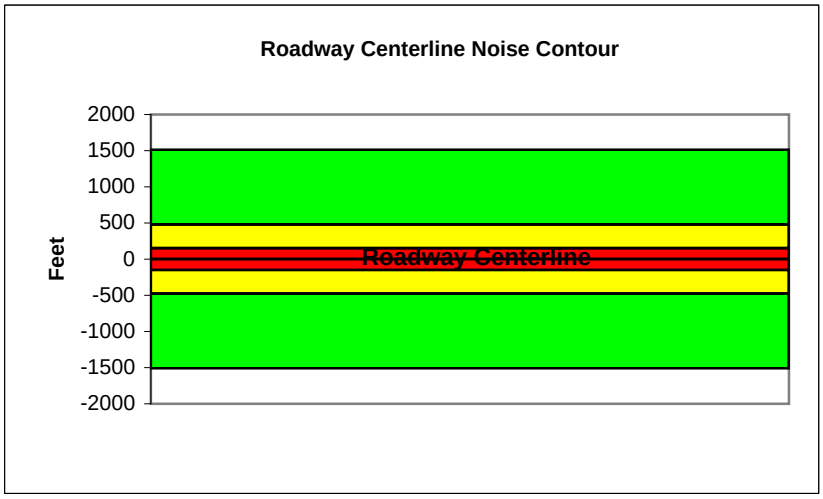
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.1	67.9	66.1	60.0	68.6	69.2
Medium Trucks:	67.4	59.3	52.9	51.3	59.8	60.1
Heavy Trucks:	71.9	59.9	50.9	52.1	61.6	61.8
Vehicle Noise:	**74.2**	**69.2**	**66.4**	**61.3**	**69.9**	**70.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1512
65 dBA	478
70 dBA	151
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	49,530
Peak Hour Traffic:	**4953**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

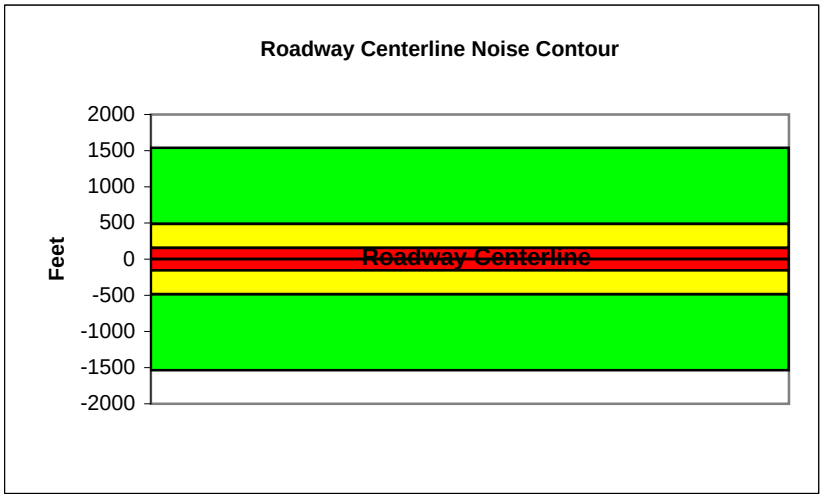
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.2	67.9	66.2	60.1	68.7	69.3
Medium Trucks:	67.4	59.4	53.0	51.4	59.9	60.1
Heavy Trucks:	72.0	60.0	51.0	52.2	61.7	61.9
Vehicle Noise:	**74.3**	**69.2**	**66.5**	**61.4**	**70.0**	**70.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1541
65 dBA	487
70 dBA	154
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between 9th Street and Arrow Highway		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	49,530
Peak Hour Traffic:	**4953**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

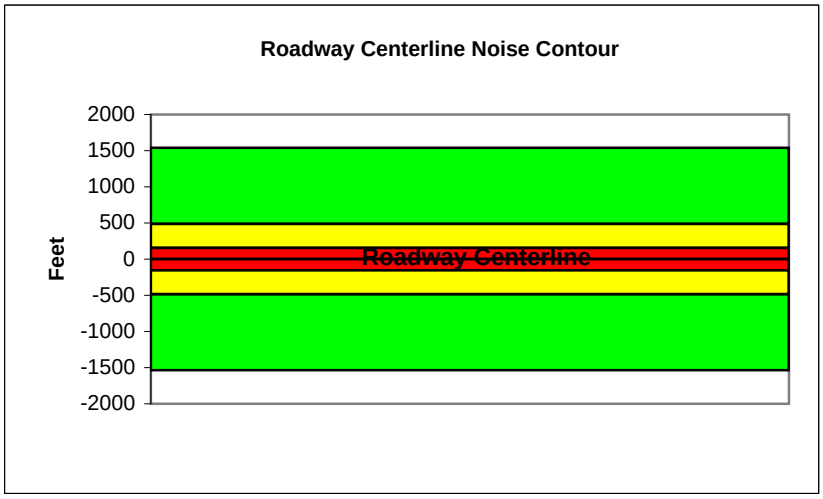
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	59.2	67.9	66.2	60.1	68.7	69.3
Medium Trucks:	67.4	59.4	53.0	51.4	59.9	60.1
Heavy Trucks:	72.0	60.0	51.0	52.2	61.7	61.9
Vehicle Noise:	**74.3**	**69.2**	**66.5**	**61.4**	**70.0**	**70.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1541
65 dBA	487
70 dBA	154
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	Between Arrow Highway and Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	40,697
Peak Hour Traffic:	**4069.7**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

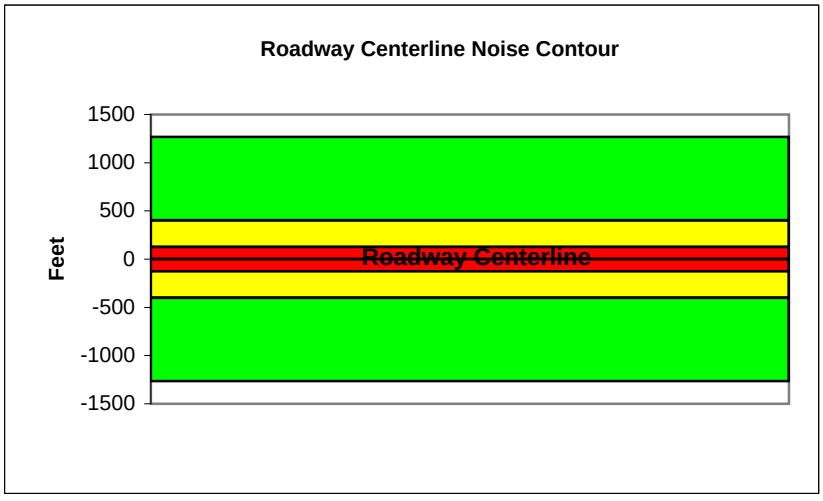
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.3	67.1	65.3	59.2	67.9	68.5
Medium Trucks:	66.6	58.5	52.1	50.6	59.0	59.3
Heavy Trucks:	71.1	59.2	50.1	51.3	60.9	61.0
Vehicle Noise:	**73.4**	**68.4**	**65.7**	**60.5**	**69.1**	**69.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1267
65 dBA	401
70 dBA	127
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Euclid Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	29,258
Peak Hour Traffic:	**2925.8**
Vehicle Speed:	45
Centerline Separation:	92

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

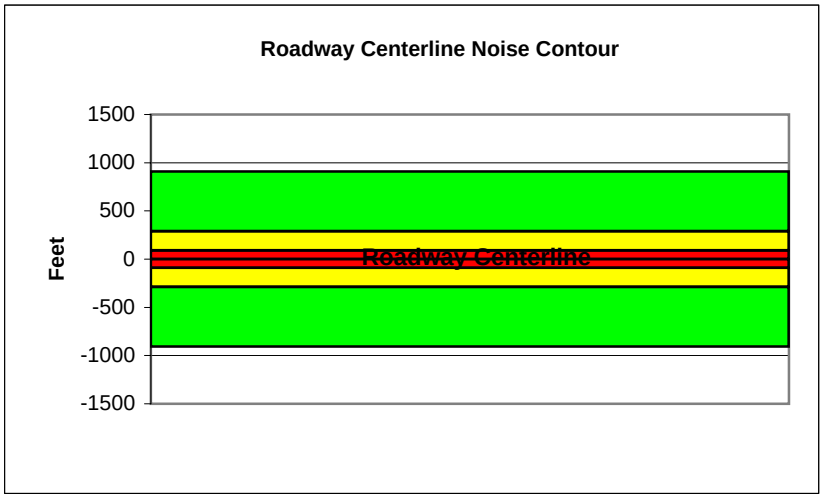
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	56.9	65.7	63.9	57.8	66.4	67.0
Medium Trucks:	65.2	57.1	50.7	49.1	57.6	57.8
Heavy Trucks:	69.7	57.7	48.7	49.9	59.4	59.6
Vehicle Noise:	**72.0**	**67.0**	**64.2**	**59.1**	**67.7**	**68.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	909
65 dBA	288
70 dBA	91
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 7th and 8th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	11,124
Peak Hour Traffic:	**1112.4**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

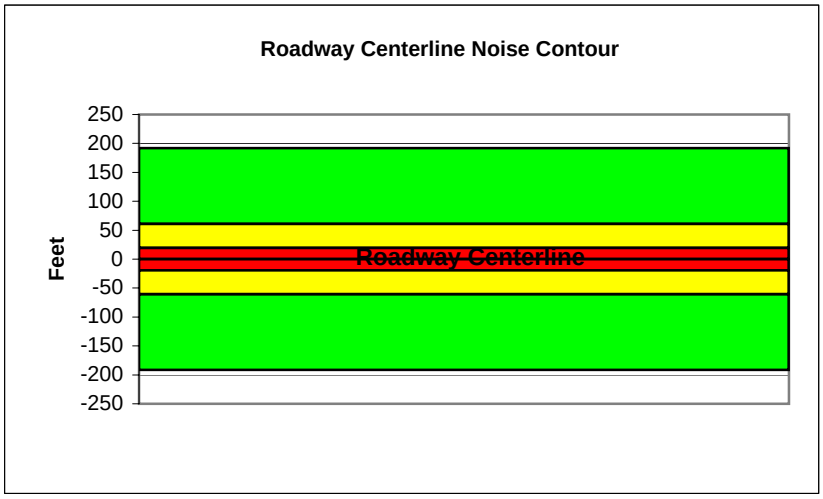
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.4	59.2	57.4	51.3	60.0	60.6
Medium Trucks:	60.1	52.1	45.7	44.1	52.6	52.8
Heavy Trucks:	65.3	53.4	44.4	45.6	55.5	55.6
Vehicle Noise:	**67.8**	**61.1**	**58.0**	**53.3**	**61.8**	**62.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	192
65 dBA	61
70 dBA	19
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 8th and 9th Street		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	13,641
Peak Hour Traffic:	**1364.1**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

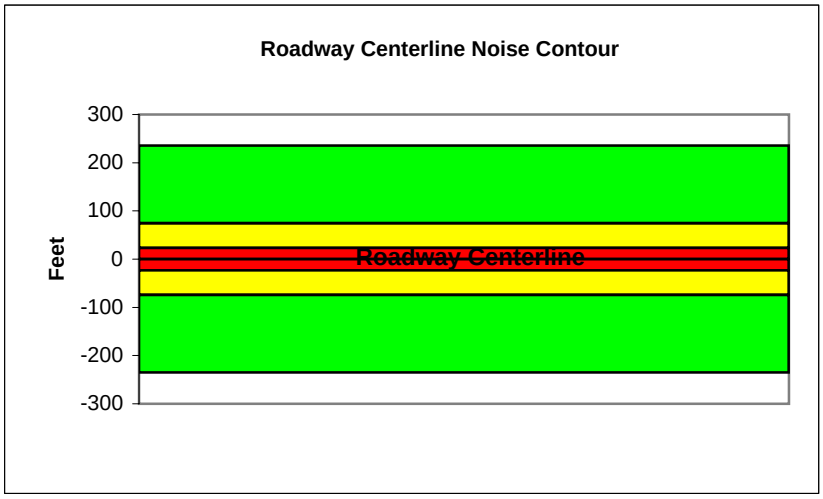
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.3	60.1	58.3	52.2	60.9	61.5
Medium Trucks:	61.0	52.9	46.6	45.0	53.5	53.7
Heavy Trucks:	66.2	54.3	45.2	46.5	56.4	56.5
Vehicle Noise:	**68.7**	**62.0**	**58.8**	**54.2**	**62.7**	**63.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	235
65 dBA	74
70 dBA	24
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between 9th Street and Arrow Hwy		

PROJECT DATA

Centerline Dist to Barrier	**0**
Barrier (0=wall, 1= berm):	**0**
Receiver Barrier Dist:	**0**
Centerline Dist. To Observer:	**100**
Barrier Near Lane CL Dist:	**0**
Barrier Far lane CL Dist:	**0**
Pad Elevation:	**0.5**
Road Elevation:	**0**
Observer Height (above grade):	**0**
Barrier Height:	**0**

Rt View: **90** Lft View: **-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	13,641
Peak Hour Traffic:	**1364.1**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

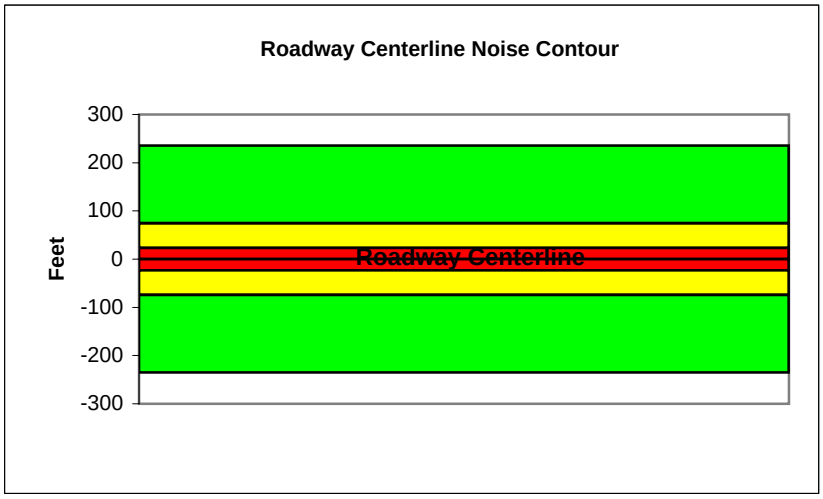
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.3	60.1	58.3	52.2	60.9	61.5
Medium Trucks:	61.0	52.9	46.6	45.0	53.5	53.7
Heavy Trucks:	66.2	54.3	45.2	46.5	56.4	56.5
Vehicle Noise:	**68.7**	**62.0**	**58.8**	**54.2**	**62.7**	**63.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	235
65 dBA	74
70 dBA	24
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	Between Arrow Hwy and Foothill Blvd		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	17,345
Peak Hour Traffic:	**1734.5**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

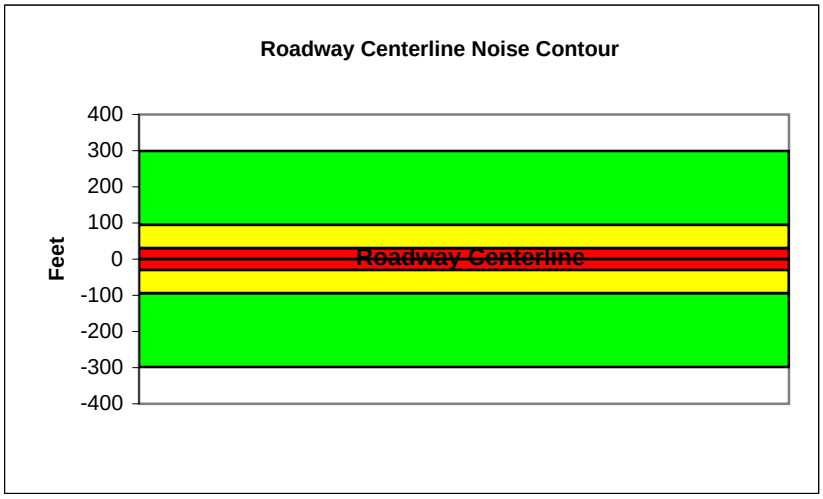
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.3	61.1	59.3	53.2	61.9	62.5
Medium Trucks:	62.1	54.0	47.6	46.0	54.5	54.8
Heavy Trucks:	67.3	55.3	46.3	47.5	57.4	57.5
Vehicle Noise:	**69.7**	**63.1**	**59.9**	**55.2**	**63.8**	**64.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	299
65 dBA	95
70 dBA	30
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Campus Avenue		
Road Segment:	North of Foothill Blvd		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	28,231
Peak Hour Traffic:	**2823.1**
Vehicle Speed:	35
Centerline Separation:	28

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

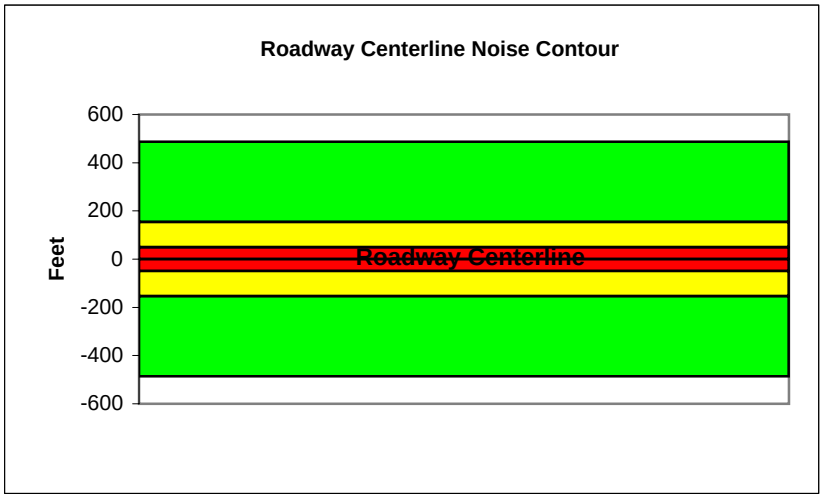
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	54.5	63.2	61.4	55.4	64.0	64.6
Medium Trucks:	64.2	56.1	49.7	48.2	56.6	56.9
Heavy Trucks:	69.4	57.5	48.4	49.6	59.5	59.7
Vehicle Noise:	**71.8**	**65.2**	**62.0**	**57.3**	**65.9**	**66.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	487
65 dBA	154
70 dBA	49
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	5,370
Peak Hour Traffic:	**537**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

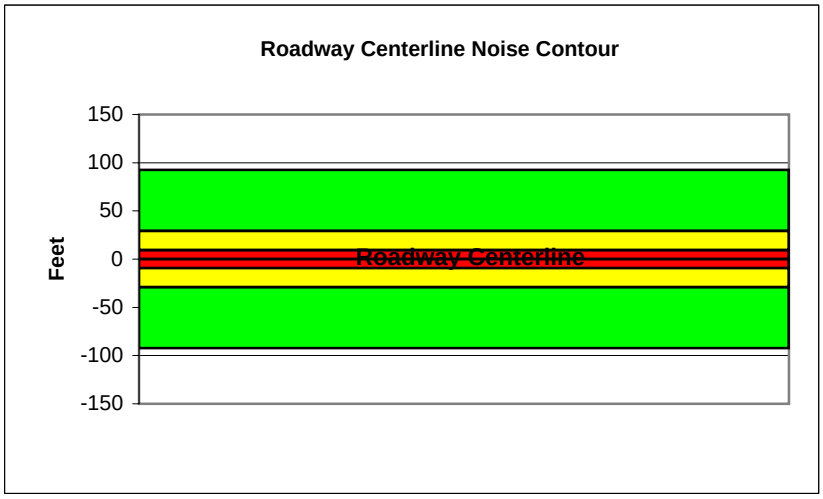
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.3	56.1	54.3	48.2	56.9	57.5
Medium Trucks:	57.0	49.0	42.6	41.0	49.5	49.7
Heavy Trucks:	62.3	50.3	41.3	42.5	52.4	52.5
Vehicle Noise:	**64.7**	**58.1**	**54.9**	**50.2**	**58.7**	**59.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	93
65 dBA	29
70 dBA	9
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	7th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,257
Peak Hour Traffic:	**625.7**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

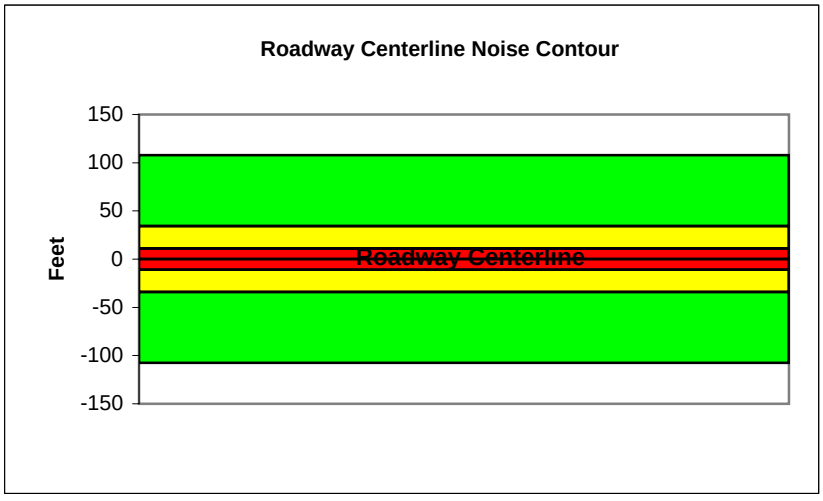
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.0	56.8	55.0	48.9	57.5	58.1
Medium Trucks:	57.7	49.6	43.2	41.7	50.2	50.4
Heavy Trucks:	62.9	51.0	41.9	43.1	53.0	53.2
Vehicle Noise:	**65.4**	**58.7**	**55.5**	**50.8**	**59.4**	**59.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	108
65 dBA	34
70 dBA	11
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	8,489
Peak Hour Traffic:	**848.9**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

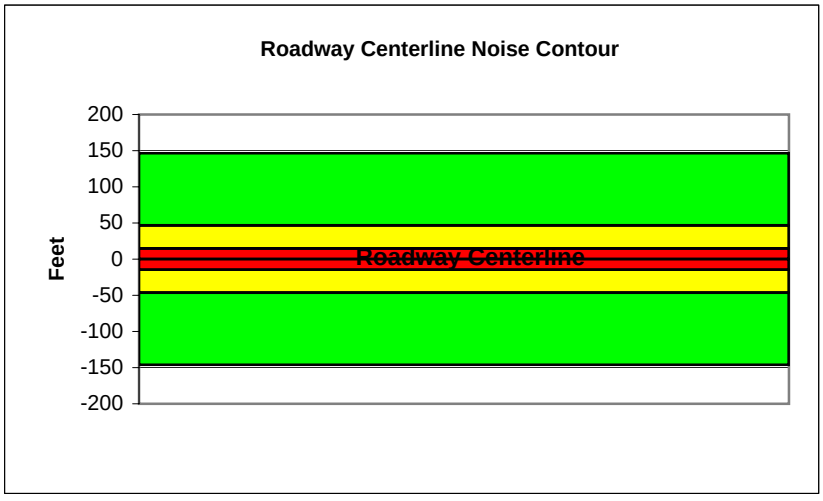
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.3	58.1	56.3	50.2	58.9	59.5
Medium Trucks:	59.0	51.0	44.6	43.0	51.5	51.7
Heavy Trucks:	64.2	52.3	43.2	44.5	54.4	54.5
Vehicle Noise:	**66.7**	**60.0**	**56.9**	**52.2**	**60.7**	**61.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	146
65 dBA	46
70 dBA	15
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	Euclid Ave to Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	9,494
Peak Hour Traffic:	**949.4**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

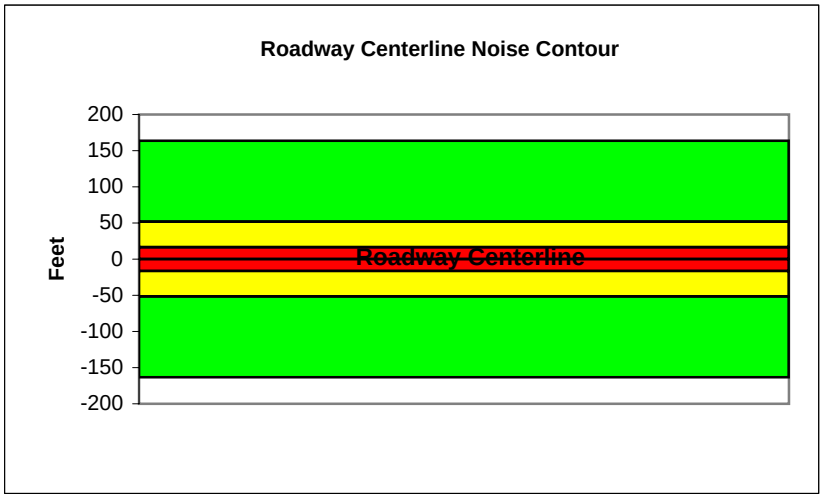
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.8	58.6	56.8	50.7	59.4	60.0
Medium Trucks:	59.5	51.4	45.1	43.5	52.0	52.2
Heavy Trucks:	64.7	52.8	43.7	45.0	54.9	55.0
Vehicle Noise:	**67.2**	**60.5**	**57.3**	**52.7**	**61.2**	**61.7**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	164
65 dBA	52
70 dBA	16
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	8th Street		
Road Segment:	East of Campus Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	6,610
Peak Hour Traffic:	**661**
Vehicle Speed:	35
Centerline Separation:	24

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

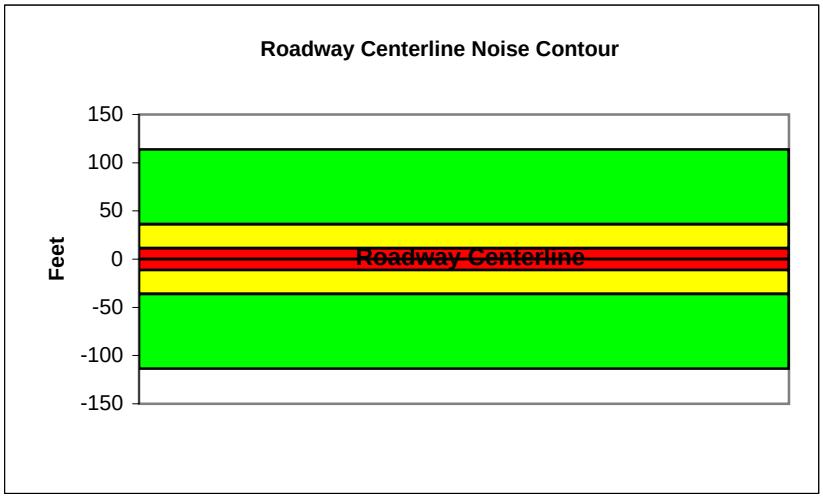
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.2	57.0	55.2	49.1	57.8	58.4
Medium Trucks:	57.9	49.9	43.5	41.9	50.4	50.6
Heavy Trucks:	63.2	51.2	42.2	43.4	53.3	53.4
Vehicle Noise:	**65.6**	**59.0**	**55.8**	**51.1**	**59.6**	**60.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	114
65 dBA	36
70 dBA	11
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	West of Euclid Ave		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	7,024
Peak Hour Traffic:	**702.4**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

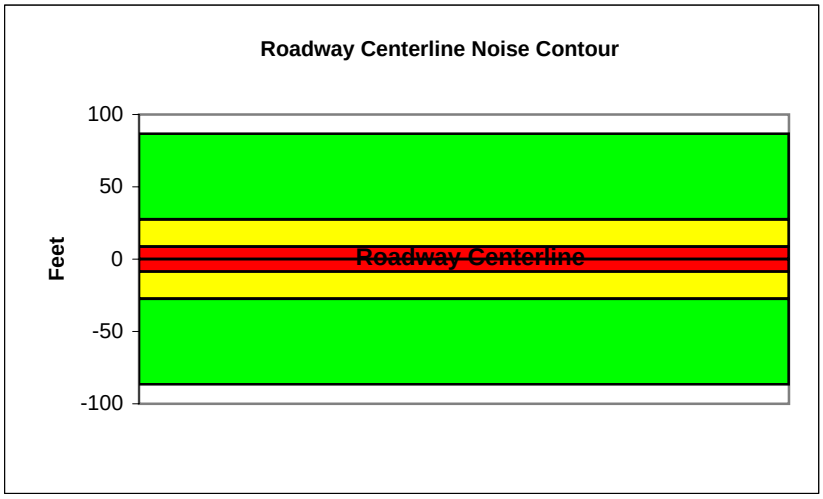
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.5	55.2	53.4	47.4	56.0	56.6
Medium Trucks:	57.1	49.0	42.6	41.0	49.5	49.8
Heavy Trucks:	62.7	50.8	41.7	42.9	53.1	53.2
Vehicle Noise:	**65.2**	**57.7**	**54.2**	**49.8**	**58.4**	**58.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	87
65 dBA	27
70 dBA	9
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	9th Street		
Road Segment:	Euclid Ave to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,572
Peak Hour Traffic:	**657.2**
Vehicle Speed:	30
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

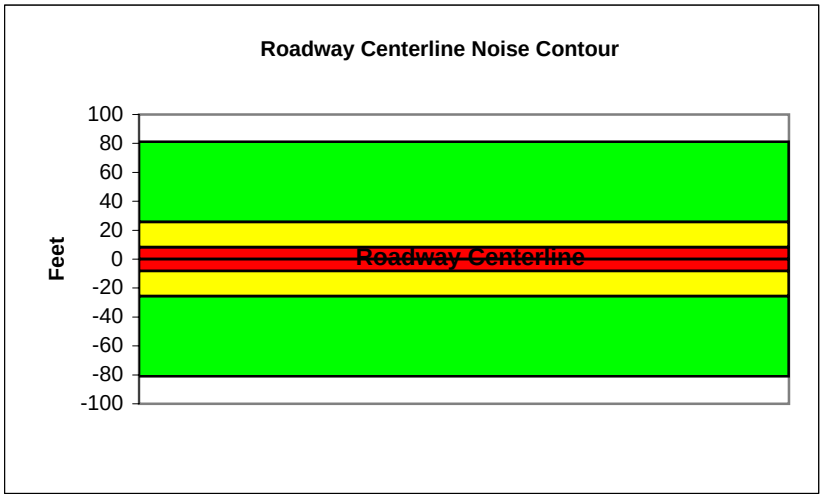
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.2	54.9	53.2	47.1	55.7	56.3
Medium Trucks:	56.8	48.7	42.3	40.7	49.2	49.5
Heavy Trucks:	62.4	50.5	41.4	42.6	52.8	52.9
Vehicle Noise:	**64.9**	**57.4**	**53.9**	**49.6**	**58.1**	**58.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	81
65 dBA	26
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	West of Euclid		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	13,133
Peak Hour Traffic:	**1313.3**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

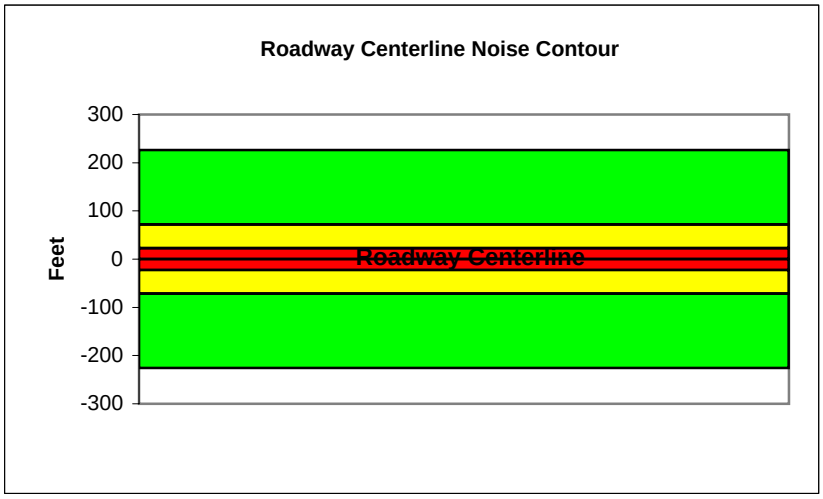
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	51.1	59.9	58.1	52.0	60.7	61.3
Medium Trucks:	60.8	52.7	46.4	44.8	53.3	53.5
Heavy Trucks:	66.0	54.1	45.0	46.3	56.2	56.3
Vehicle Noise:	**68.5**	**61.8**	**58.7**	**54.0**	**62.5**	**63.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	226
65 dBA	72
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	Euclid to Campus		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	16,088
Peak Hour Traffic:	**1608.8**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

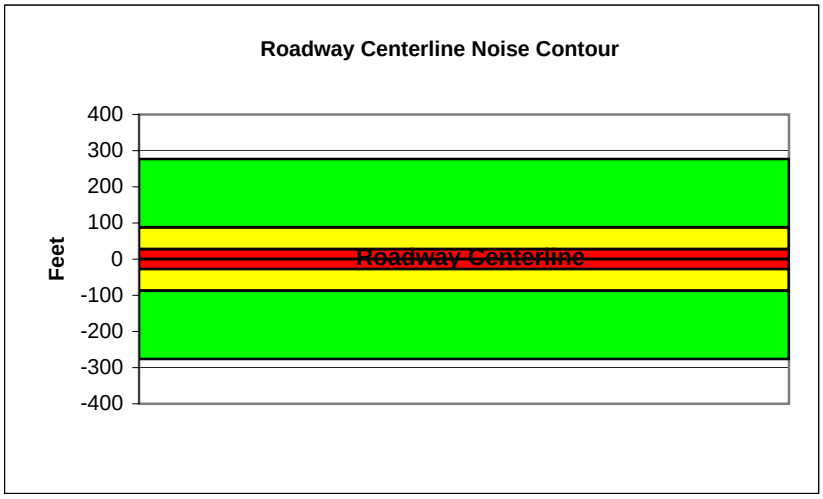
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.0	60.8	59.0	52.9	61.5	62.1
Medium Trucks:	61.7	53.6	47.2	45.7	54.2	54.4
Heavy Trucks:	66.9	55.0	45.9	47.1	57.0	57.2
Vehicle Noise:	**69.4**	**62.7**	**59.5**	**54.8**	**63.4**	**63.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	277
65 dBA	88
70 dBA	28
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Arrow Highway		
Road Segment:	East of Campus		

PROJECT DATA

Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)

Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA

Road Grade:	0
Average Daily Traffic:	17,011
Peak Hour Traffic:	**1701.1**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

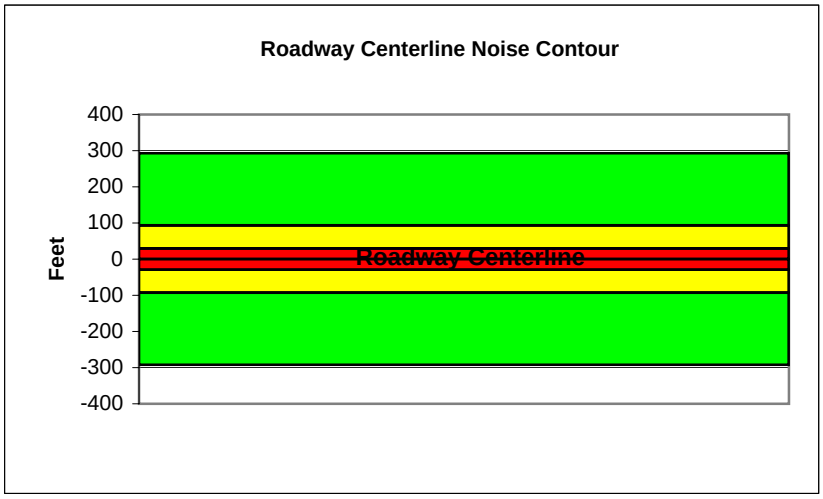
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	52.2	61.0	59.2	53.1	61.8	62.4
Medium Trucks:	61.9	53.9	47.5	45.9	54.4	54.6
Heavy Trucks:	67.2	55.2	46.2	47.4	57.3	57.4
Vehicle Noise:	**69.6**	**63.0**	**59.8**	**55.1**	**63.7**	**64.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	293
65 dBA	93
70 dBA	29
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	West of Euclid		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	34,606
Peak Hour Traffic:	**3460.6**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

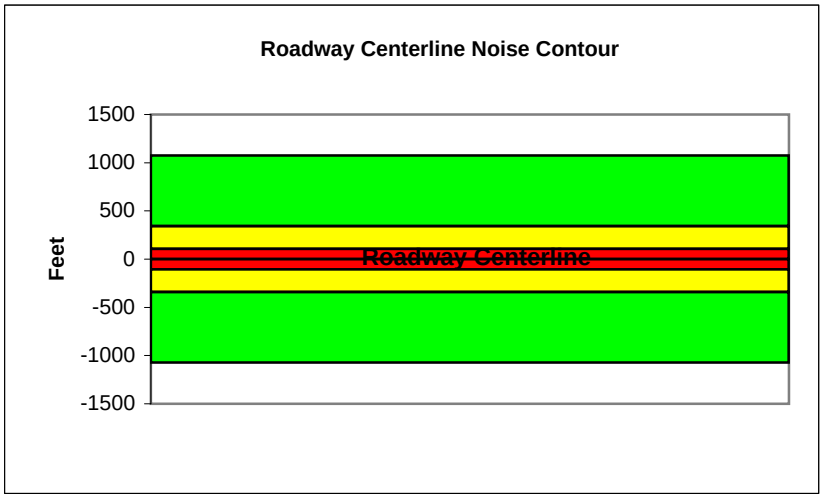
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.1	66.9	65.1	59.0	67.7	68.3
Medium Trucks:	66.4	58.3	52.0	50.4	58.9	59.1
Heavy Trucks:	70.9	59.0	49.9	51.2	60.7	60.8
Vehicle Noise:	**73.3**	**68.2**	**65.5**	**60.3**	**68.9**	**69.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1077
65 dBA	340
70 dBA	108
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	Euclid to Campus		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	32,509
Peak Hour Traffic:	**3250.9**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

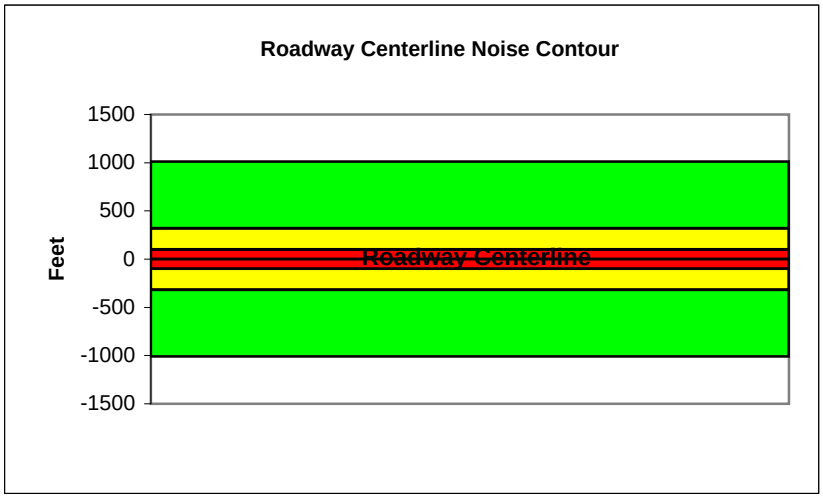
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.9	66.6	64.9	58.8	67.4	68.0
Medium Trucks:	66.1	58.1	51.7	50.1	58.6	58.8
Heavy Trucks:	70.7	58.7	49.7	50.9	60.4	60.6
Vehicle Noise:	**73.0**	**68.0**	**65.2**	**60.1**	**68.7**	**69.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1012
65 dBA	320
70 dBA	101
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Upland Downtown Specific Plan	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10105851
Roadway:	Foothill Boulevard		
Road Segment:	East of Campus Ave		

PROJECT DATA			
Centerline Dist to Barrier	**0**		
Barrier (0=wall, 1= berm):	**0**		
Receiver Barrier Dist:	**0**		
Centerline Dist. To Observer:	**100**		
Barrier Near Lane CL Dist:	**0**		
Barrier Far lane CL Dist:	**0**		
Pad Elevation:	**0.5**		
Road Elevation:	**0**		
Observer Height (above grade):	**0**		
Barrier Height:	**0**		
Rt View:	**90**	Lft View:	**-90**

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	**0**
Medium Trucks:	**2.3**
Heavy Trucks:	**8**

SITE DATA	
Road Grade:	0
Average Daily Traffic:	33,464
Peak Hour Traffic:	**3346.4**
Vehicle Speed:	45
Centerline Separation:	50

NOISE INPUTS

Site conditions **HARD SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

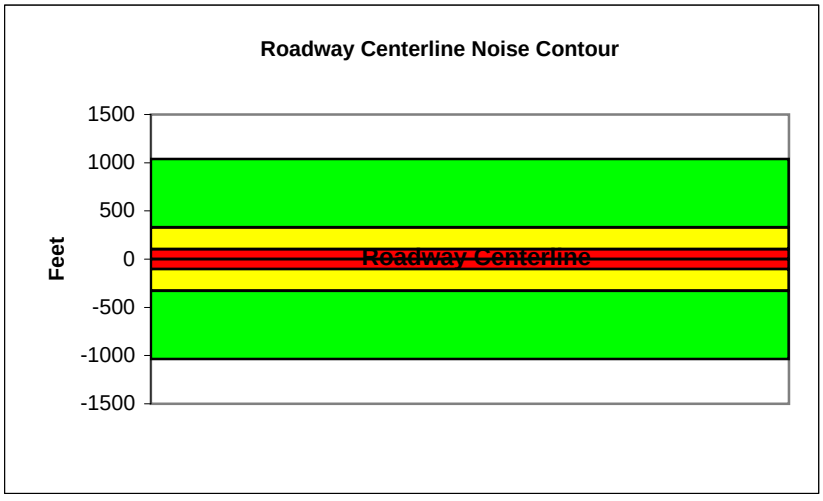
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.0	66.8	65.0	58.9	67.6	68.2
Medium Trucks:	66.3	58.2	51.8	50.2	58.7	59.0
Heavy Trucks:	70.8	58.9	49.8	51.0	60.6	60.7
Vehicle Noise:	**73.1**	**68.1**	**65.4**	**60.2**	**68.8**	**69.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	1040
65 dBA	329
70 dBA	104
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Site Number: Up001			
Recorded By: John Shetland			
Job Number: 10-107289			
Date: 5/25/10			
Time: 12:20 p.m.			
Location: Along Arrow Highway, between Euclid and 2nd Ave. (City Hall parking lot)			
Source of Peak Noise: Vehicles; generator; pedestrians			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
66.8	50.3	80.2	99.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**2548189**	**11/14/2007**	
	Microphone	**Brüel & Kjær**	**4189**	**2543364**	**11/15/2007**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**4265**	**7/18/2006**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**7/31/2006**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** ☼
	Note: dBA Offset =		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	1.5	77.5	970.2

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 2.0.2
Start Time:		05/25/2010 12:17:53
End Time:		05/25/2010 12:27:53
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		140.15

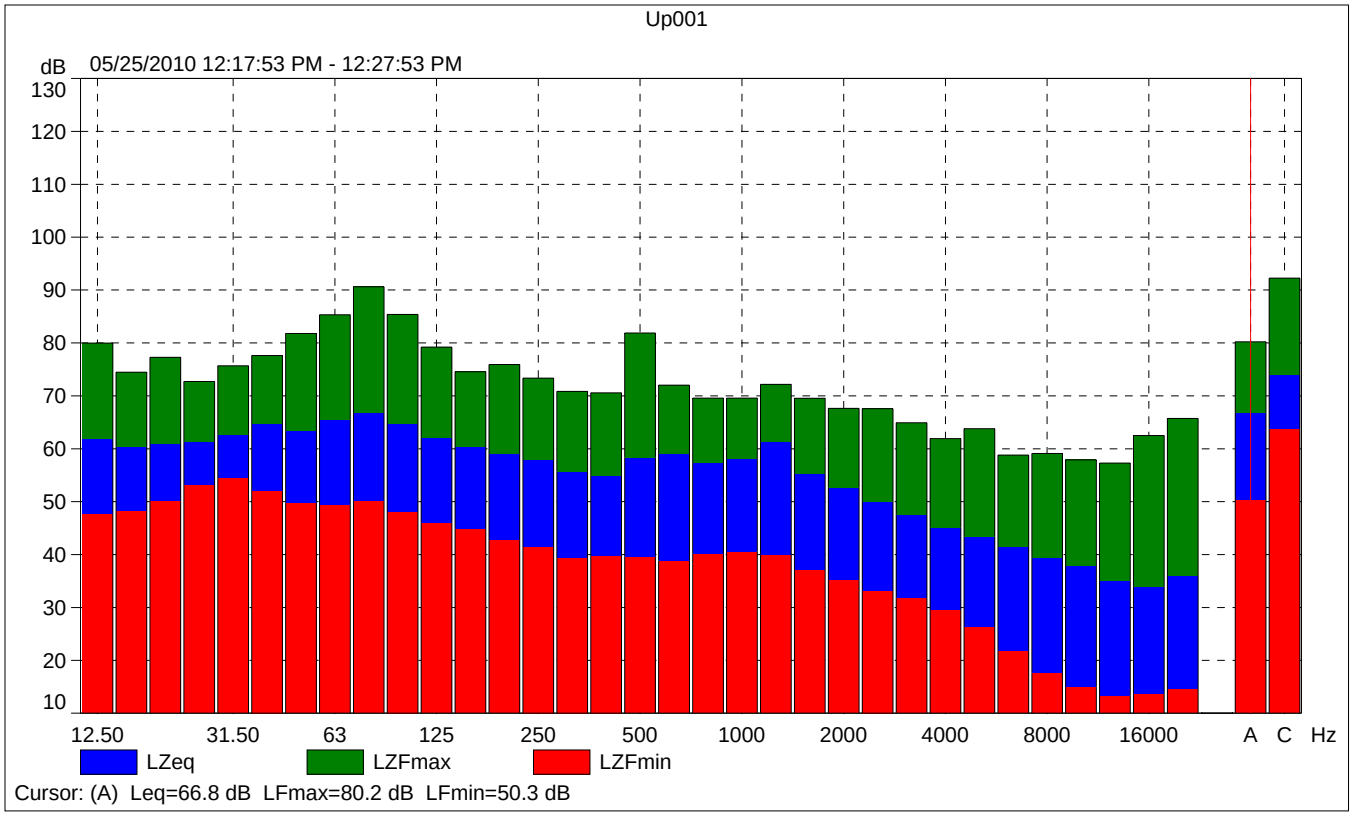
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

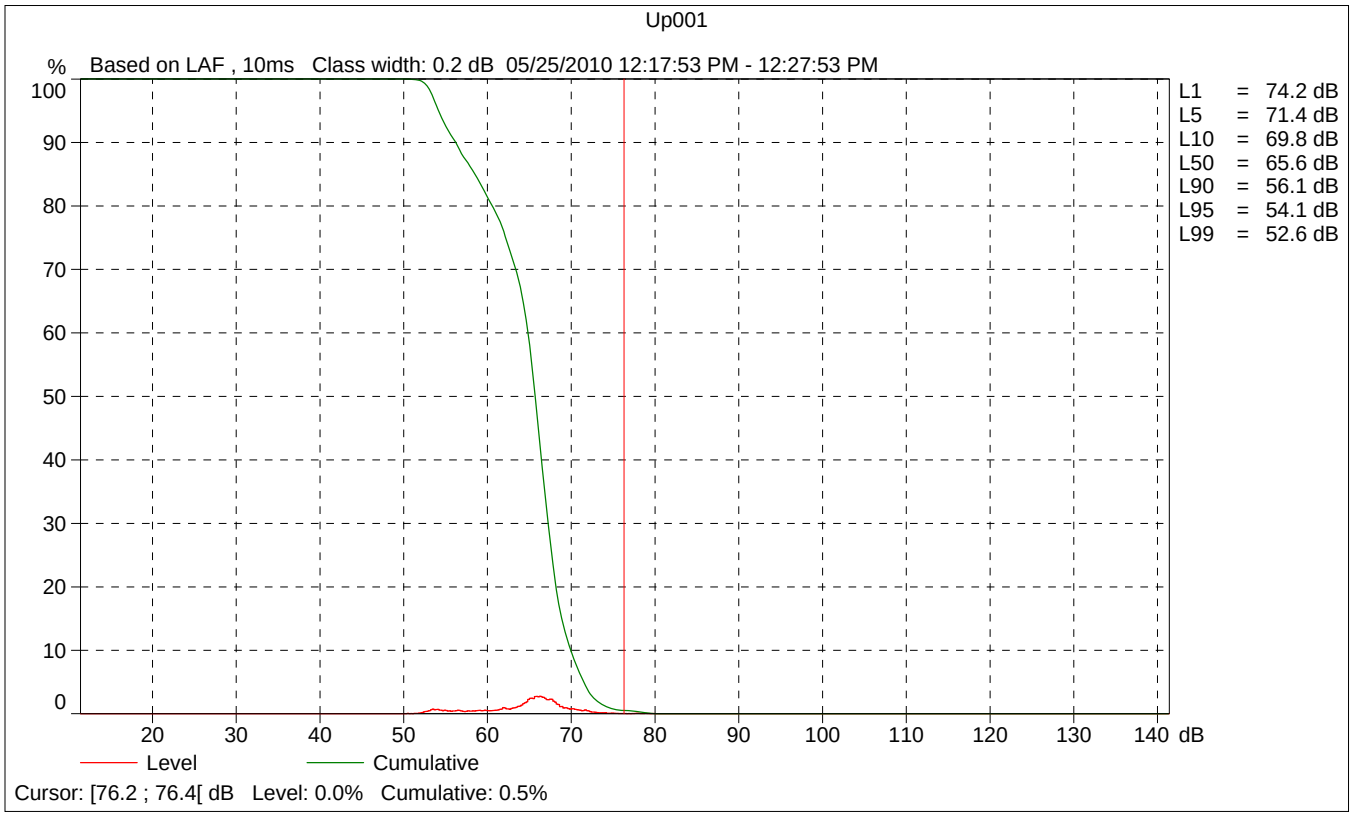
Instrument Serial Number:		2548189
Microphone Serial Number:		2543364
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Diffuse-field

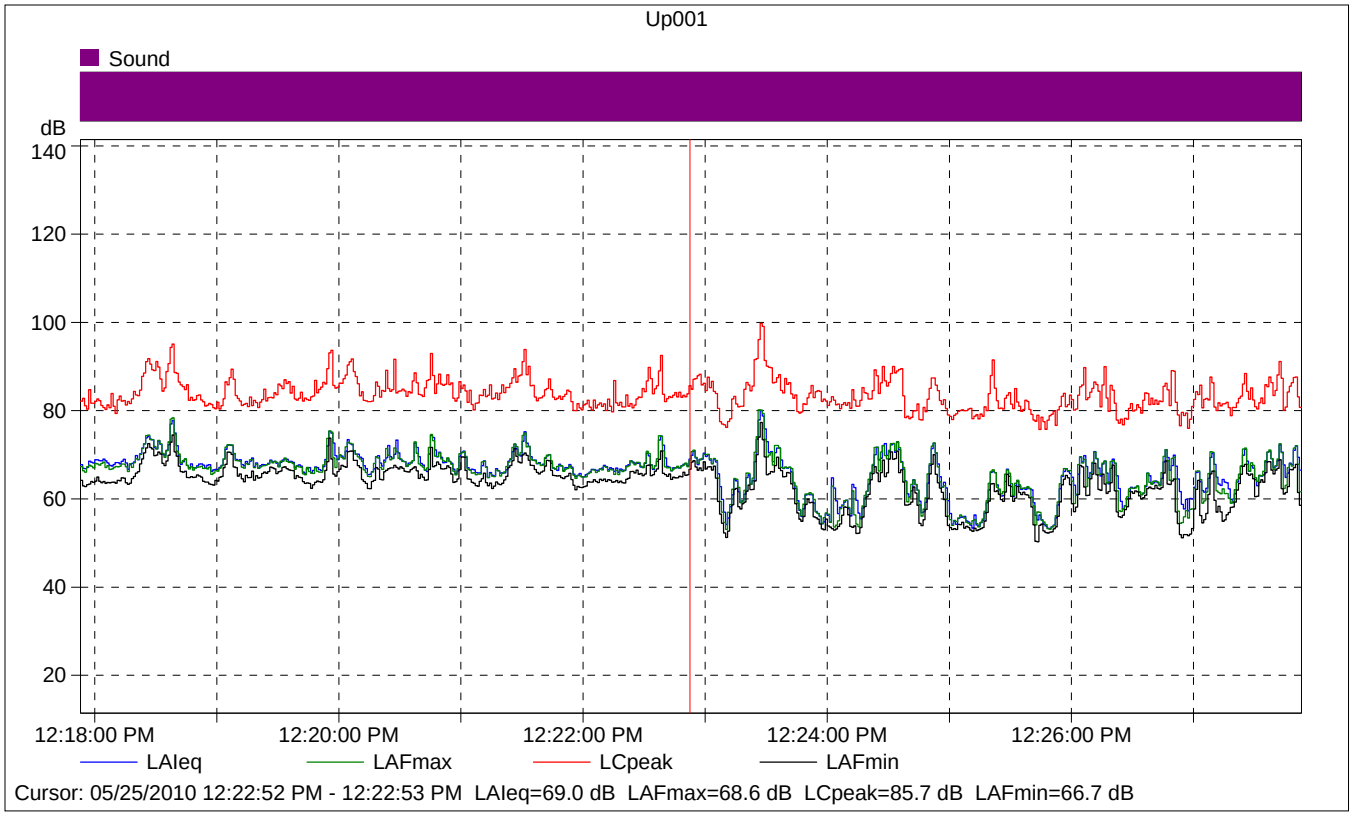
Calibration Time:		05/24/2010 16:09:52
Calibration Type:		External reference
Sensitivity:		54.72 mV/Pa

Up001

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	66.8	80.2	50.3
Time	12:17:53 PM	12:27:53 PM	0:10:00				
Date	05/25/2010	05/25/2010					

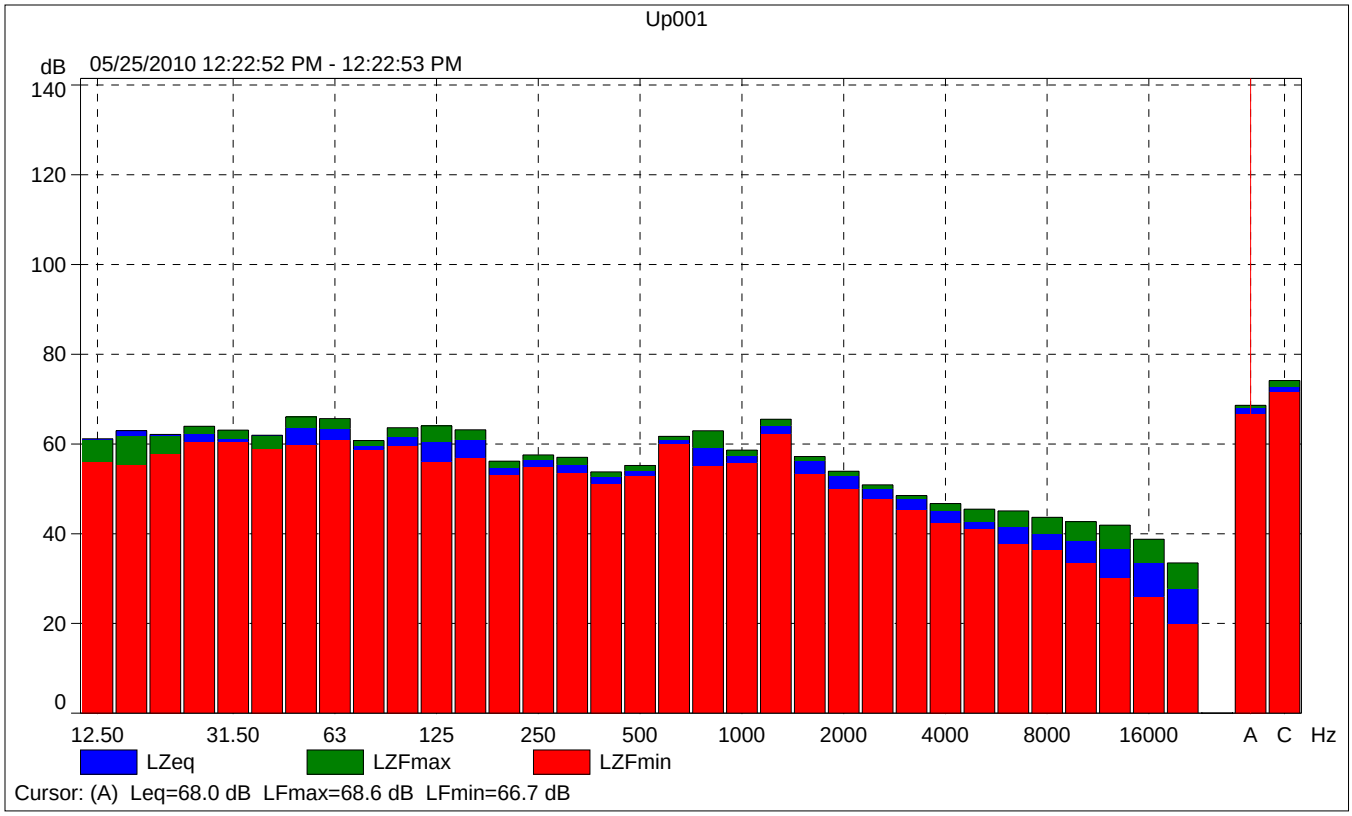

Up001
dB
05/25/2010 12:17:53 PM - 12:27:53 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=66.8 dB LFmax=80.2 dB LFmin=50.3 dB

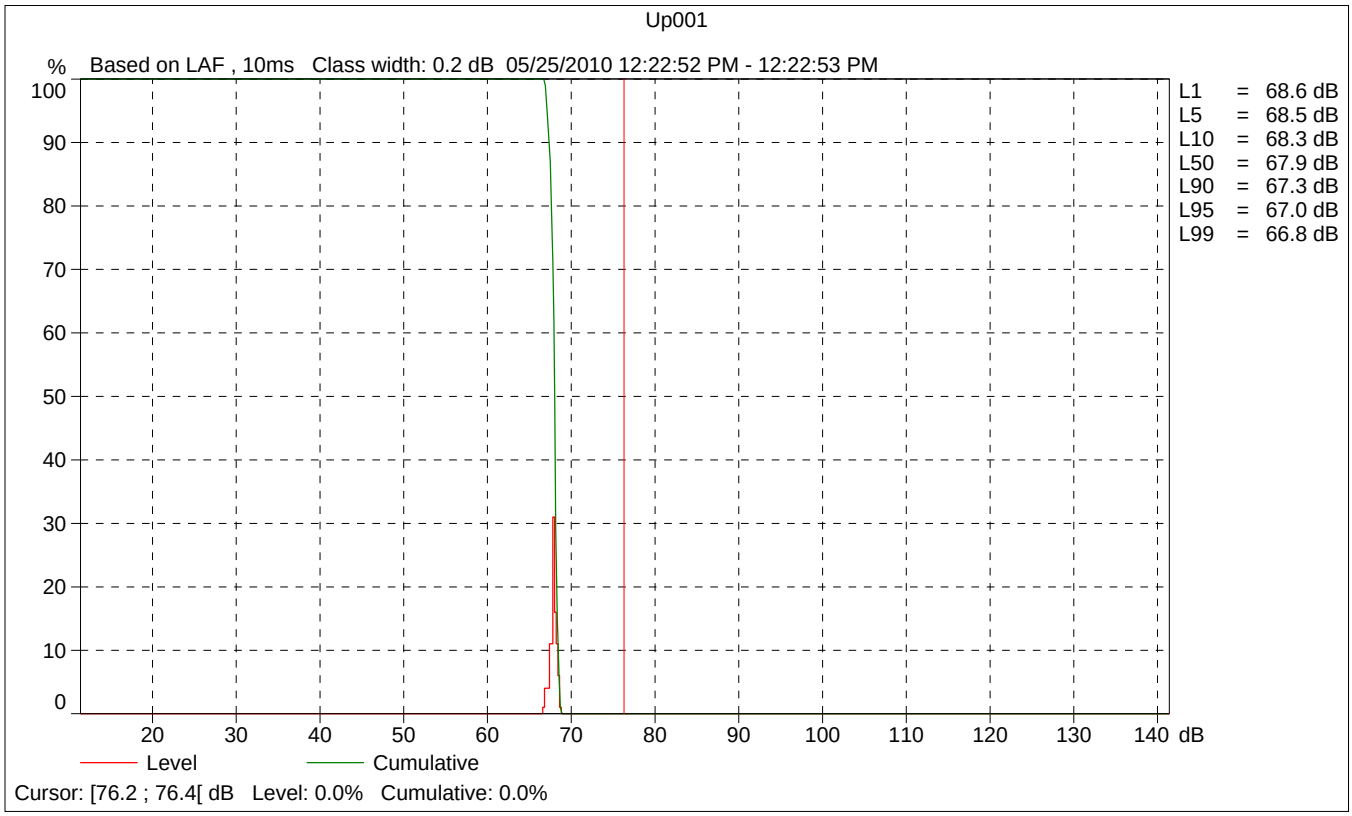

Up001
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:17:53 PM - 12:27:53 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 74.2 dB
L5 = 71.4 dB
L10 = 69.8 dB
L50 = 65.6 dB
L90 = 56.1 dB
L95 = 54.1 dB
L99 = 52.6 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.5%

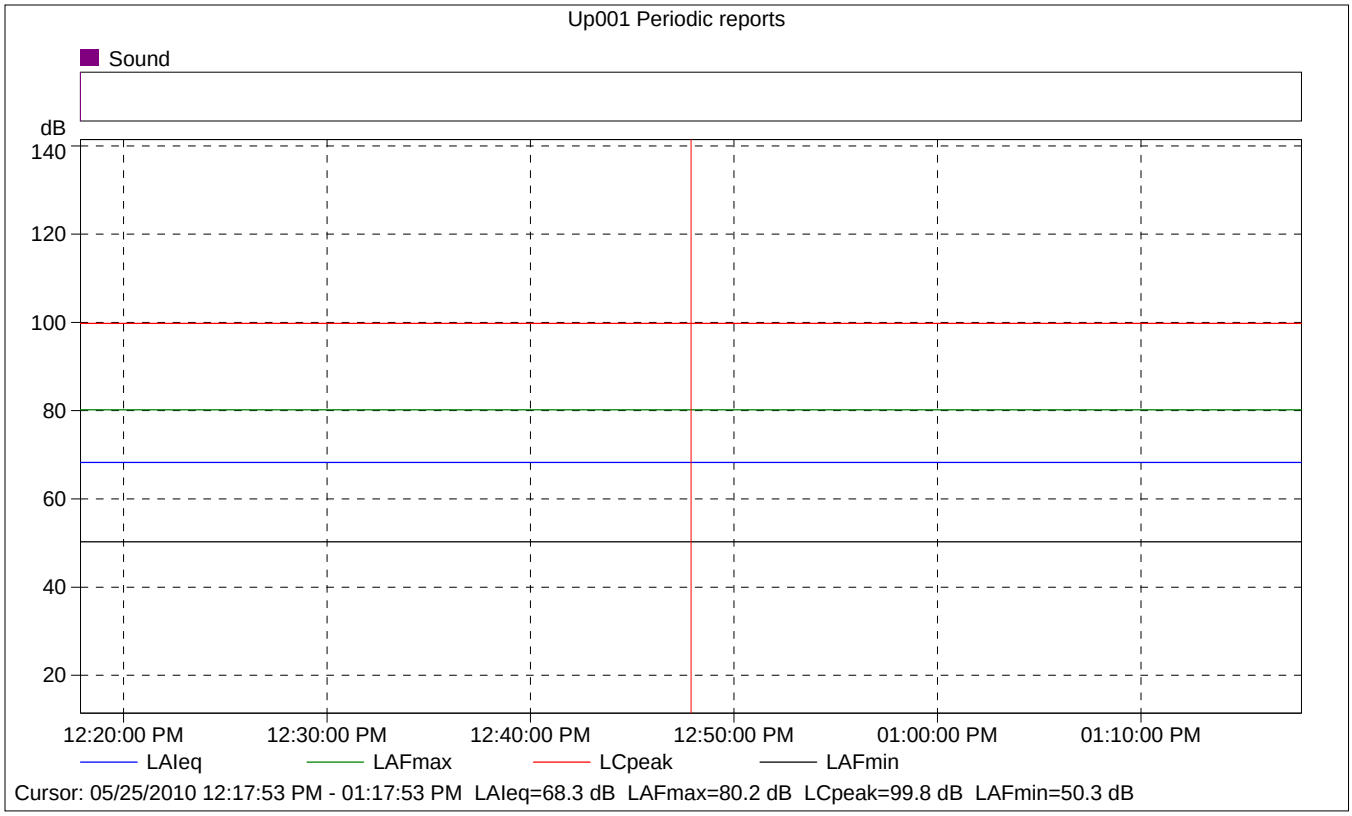


Up001

	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			69.0	68.6	66.7
Time	12:22:52 PM	0:00:01			
Date	05/25/2010				

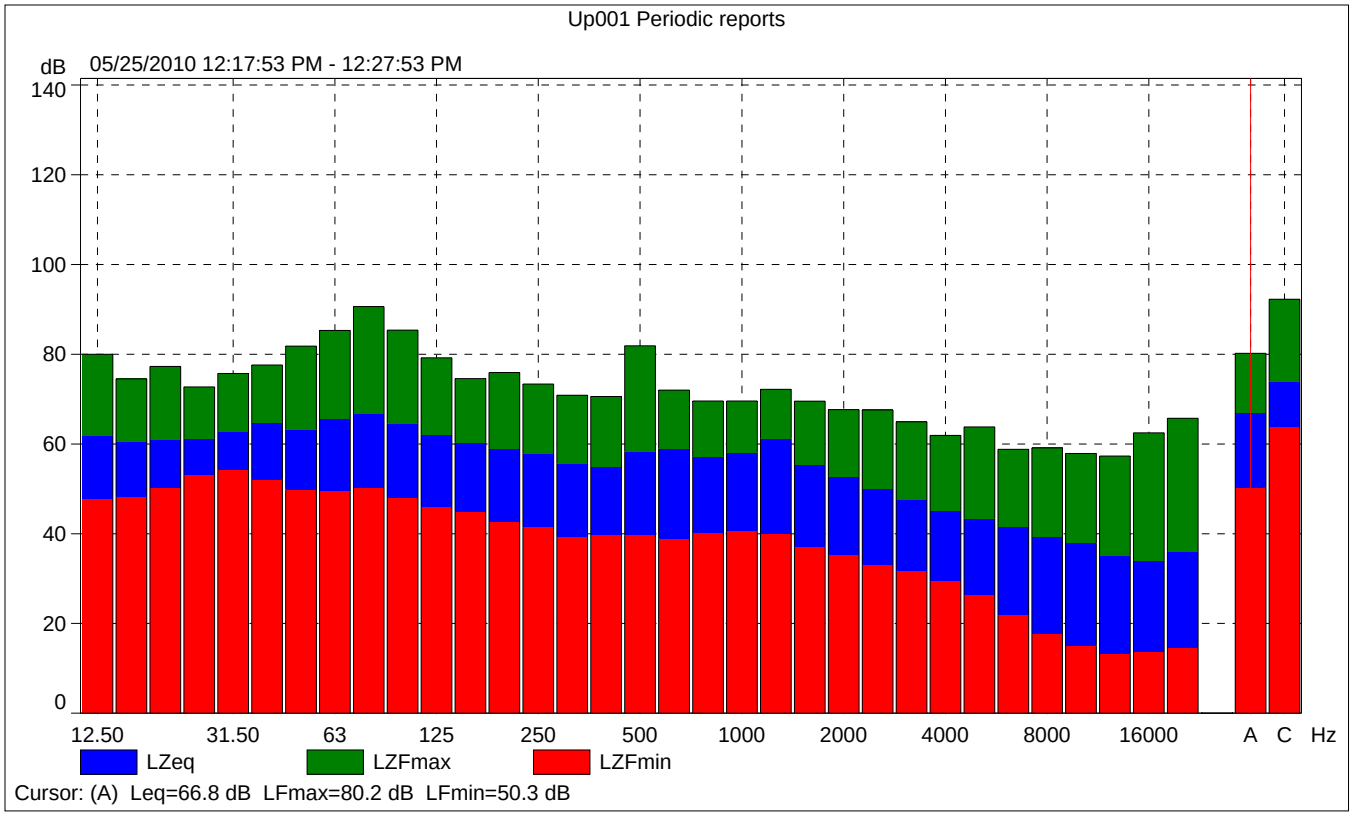

Up001
dB
05/25/2010 12:22:52 PM - 12:22:53 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=68.0 dB LFmax=68.6 dB LFmin=66.7 dB

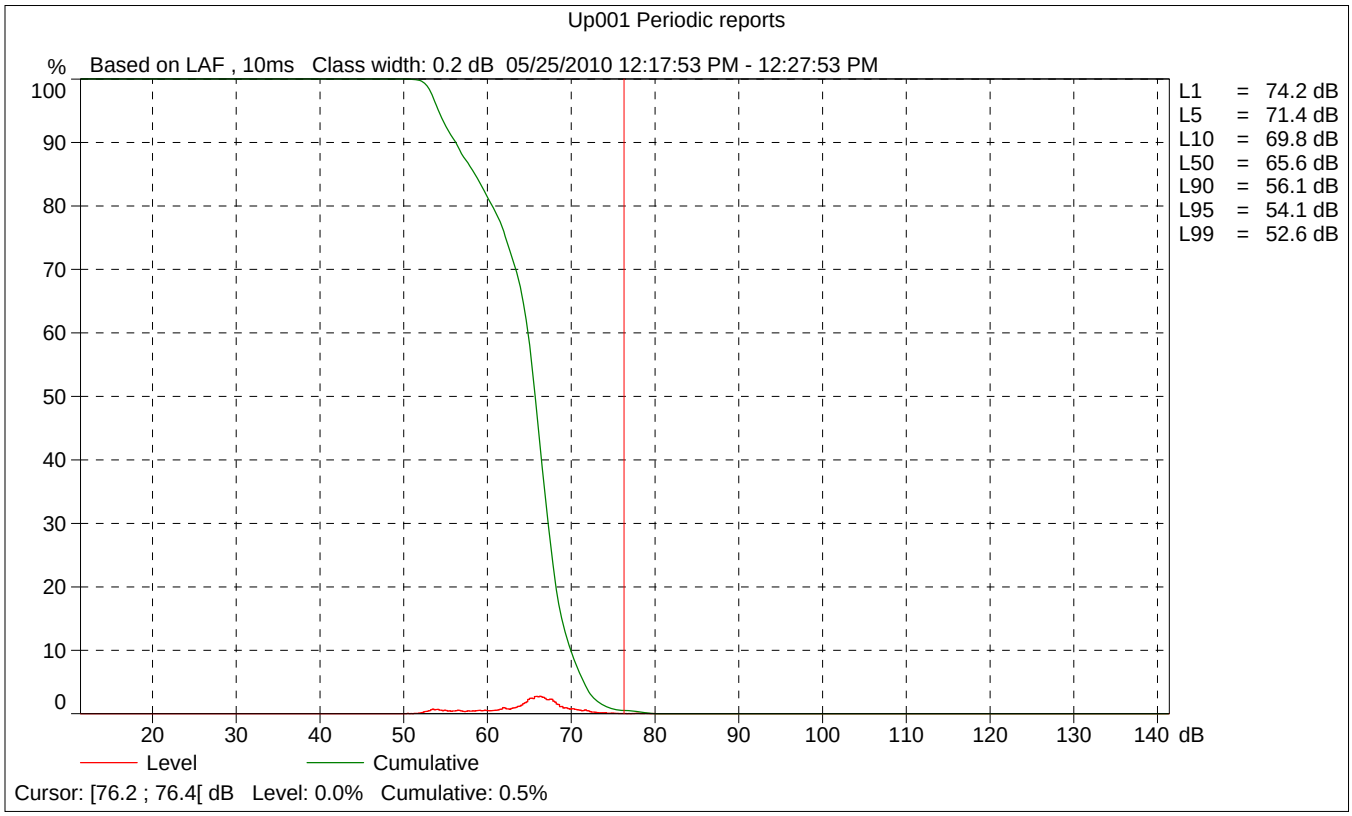

Up001
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:22:52 PM - 12:22:53 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 68.6 dB
L5 = 68.5 dB
L10 = 68.3 dB
L50 = 67.9 dB
L90 = 67.3 dB
L95 = 67.0 dB
L99 = 66.8 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%

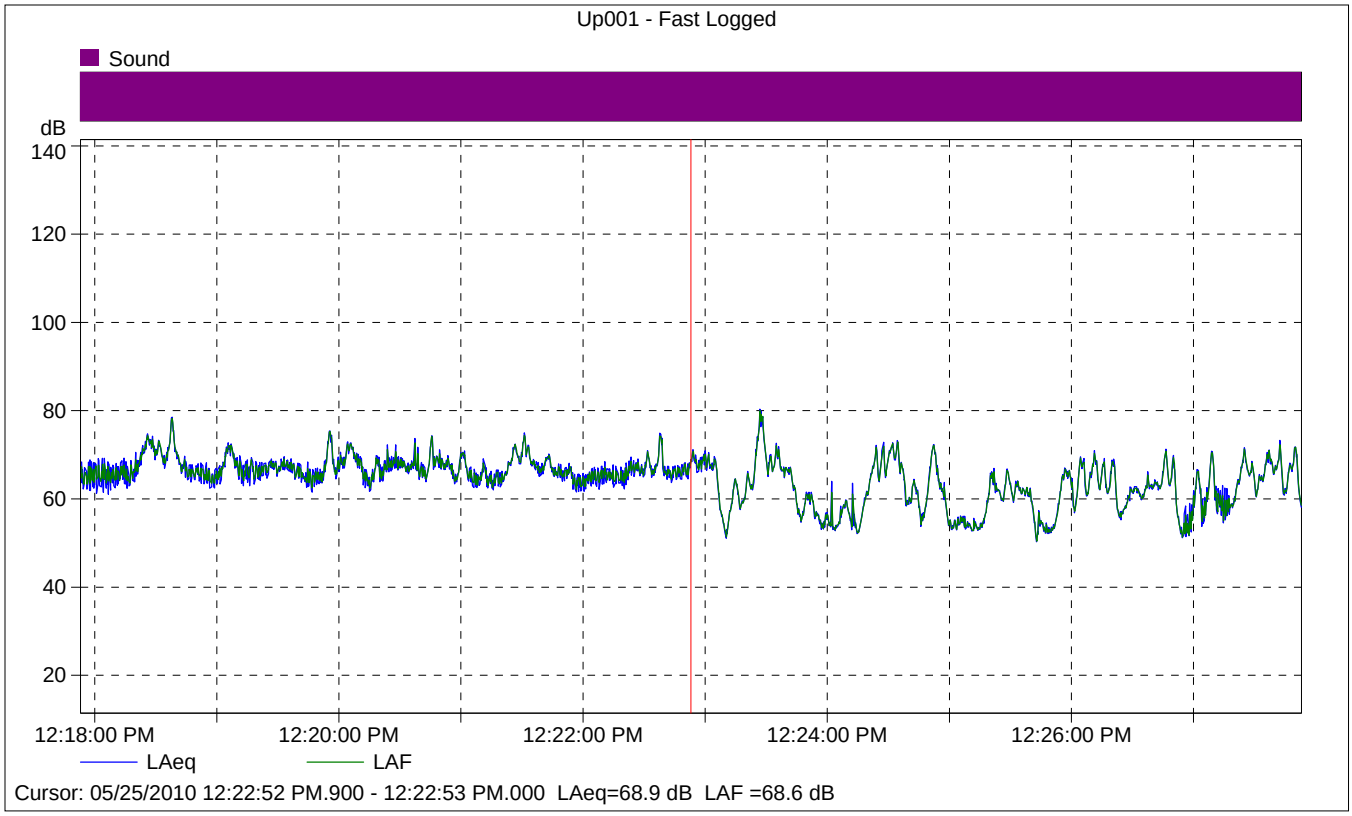


Up001 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	68.3	80.2	50.3
Time	12:17:53 PM	0:10:00				
Date	05/25/2010					


Up001 Periodic reports
dB
05/25/2010 12:17:53 PM - 12:27:53 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=66.8 dB LFmax=80.2 dB LFmin=50.3 dB


Up001 Periodic reports
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:17:53 PM - 12:27:53 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 74.2 dB
L5 = 71.4 dB
L10 = 69.8 dB
L50 = 65.6 dB
L90 = 56.1 dB
L95 = 54.1 dB
L99 = 52.6 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.5%



Up001 - Fast Logged

	Start time	Elapsed time	LAeq [dB]
Value			68.9
Time	12:22:52 PM.900	0:00:00.100	
Date	05/25/2010		

Site Number: Up002			
Recorded By: John Shetland			
Job Number: 10-107289			
Date: 5/25/10			
Time: 12:40 p.m.			
Location: Southwest corner of Washington Blvd. and 6th Ave.			
Source of Peak Noise: Vehicles			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
58.6	43.1	80.8	96.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**2548189**	**11/14/2007**	
	Microphone	**Brüel & Kjær**	**4189**	**2543364**	**11/15/2007**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**4265**	**7/18/2006**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**7/31/2006**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** ☼
	Note: dBA Offset =		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	2.8	77.3	970.9

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 2.0.2
Start Time:		05/25/2010 12:37:08
End Time:		05/25/2010 12:47:08
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		140.15

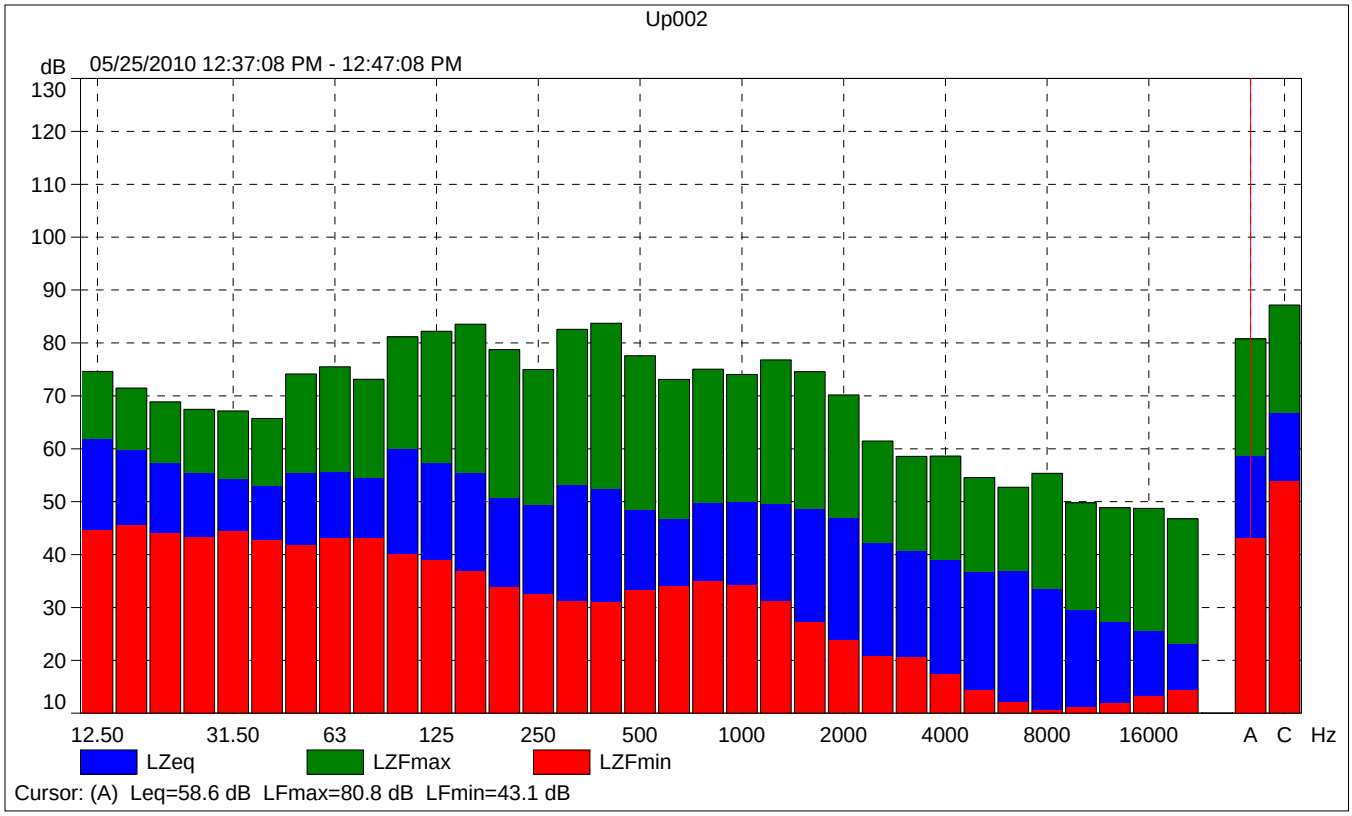
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

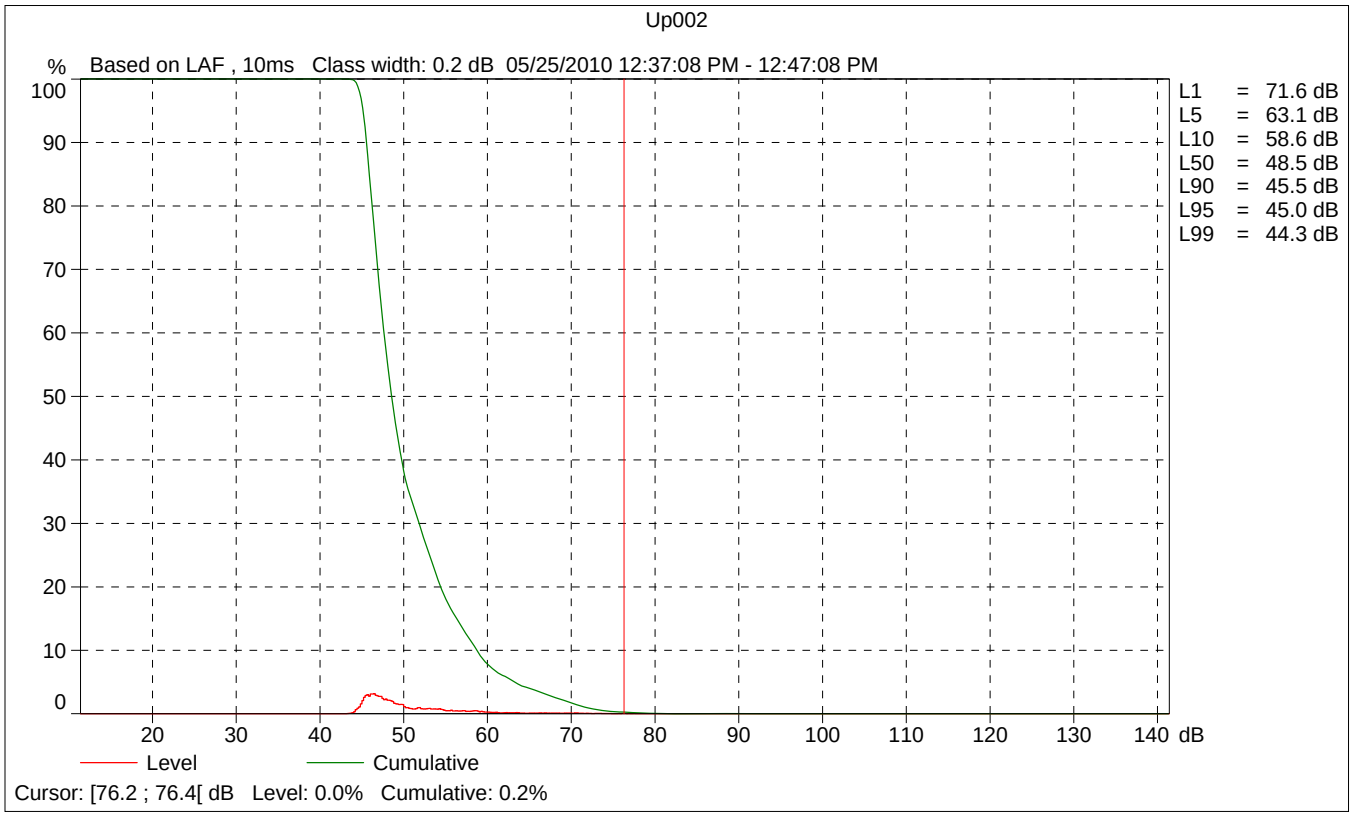
Instrument Serial Number:		2548189
Microphone Serial Number:		2543364
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Diffuse-field

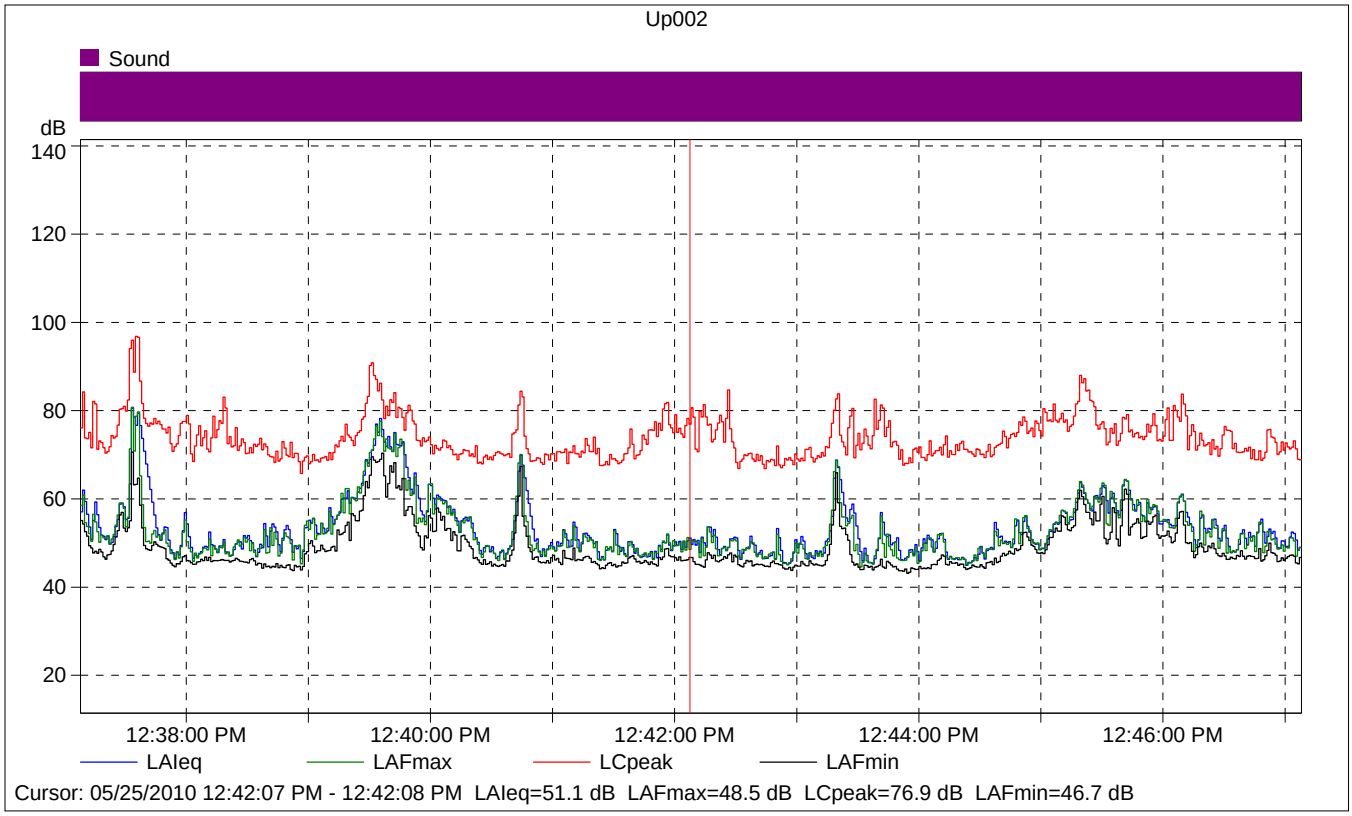
Calibration Time:		05/24/2010 16:09:52
Calibration Type:		External reference
Sensitivity:		54.72 mV/Pa

Up002

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	58.6	80.8	43.1
Time	12:37:08 PM	12:47:08 PM	0:10:00				
Date	05/25/2010	05/25/2010					

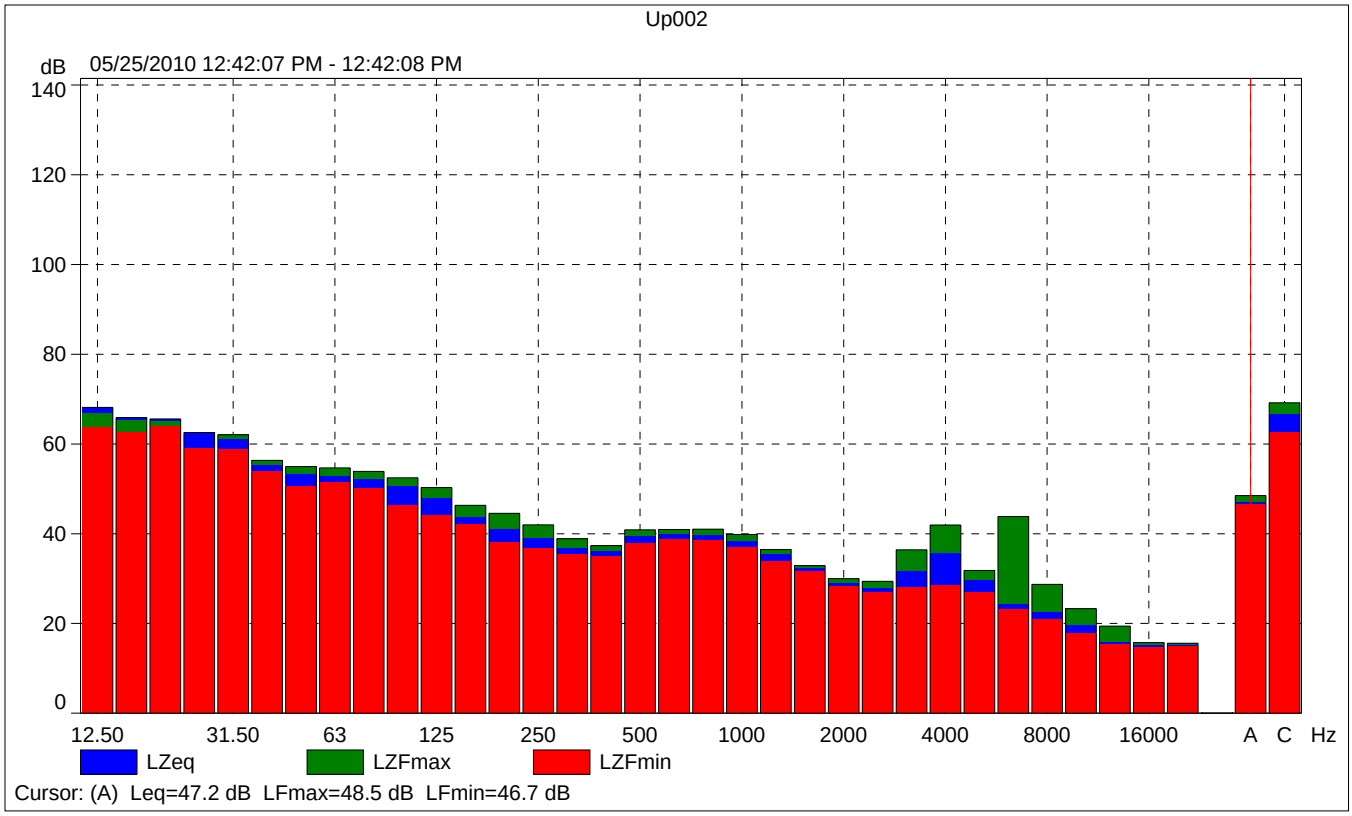

Up002
dB
05/25/2010 12:37:08 PM - 12:47:08 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=58.6 dB LFmax=80.8 dB LFmin=43.1 dB

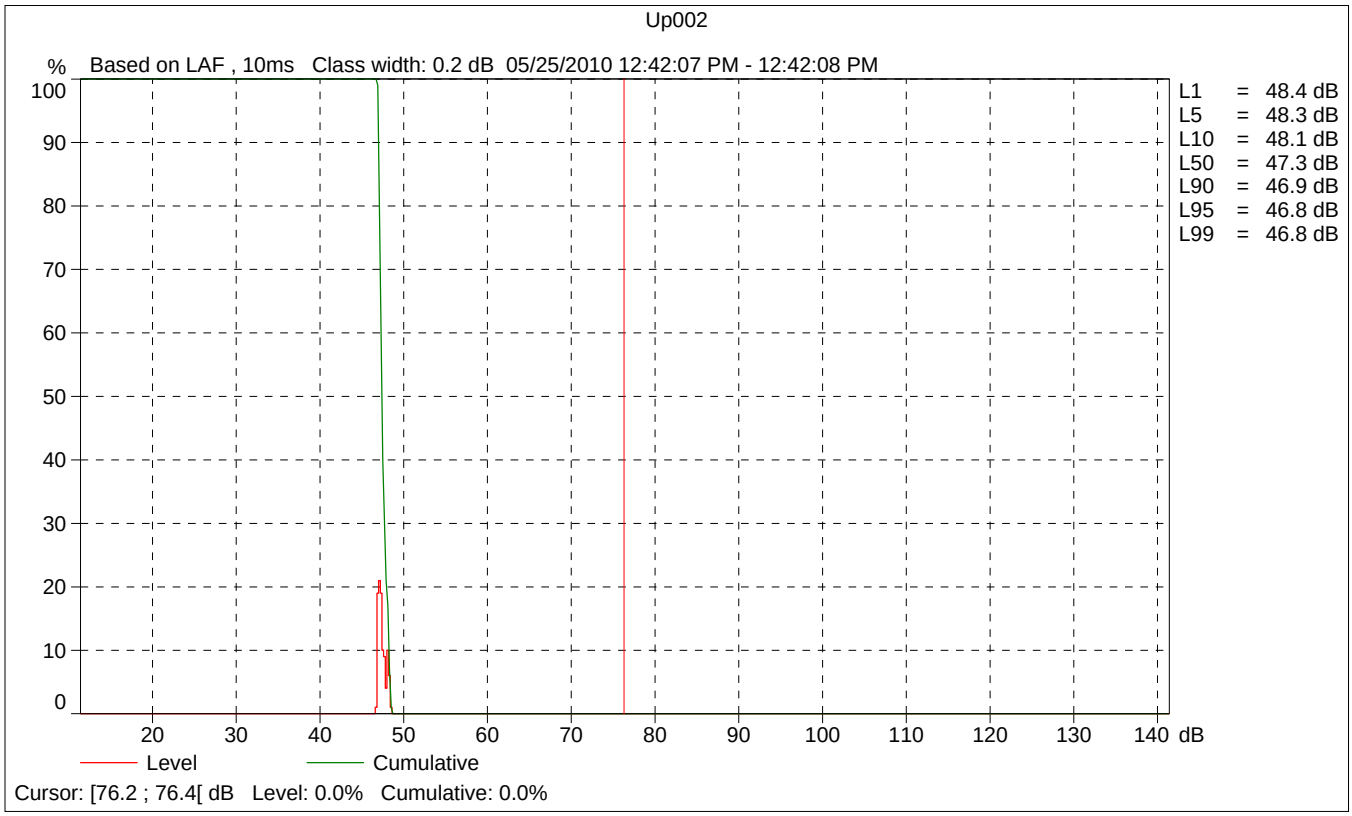

Up002
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:37:08 PM - 12:47:08 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 71.6 dB
L5 = 63.1 dB
L10 = 58.6 dB
L50 = 48.5 dB
L90 = 45.5 dB
L95 = 45.0 dB
L99 = 44.3 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.2%

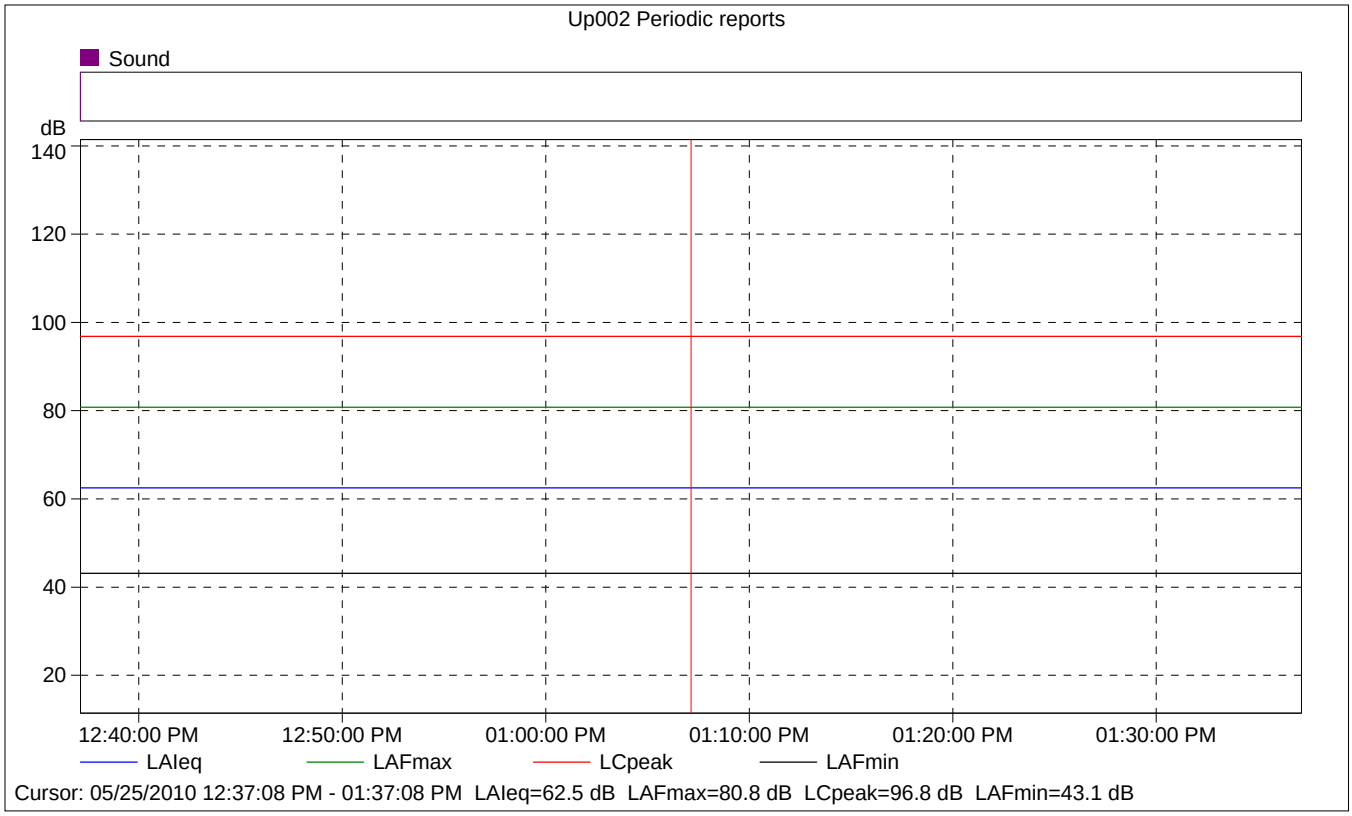


Up002

	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			51.1	48.5	46.7
Time	12:42:07 PM	0:00:01			
Date	05/25/2010				

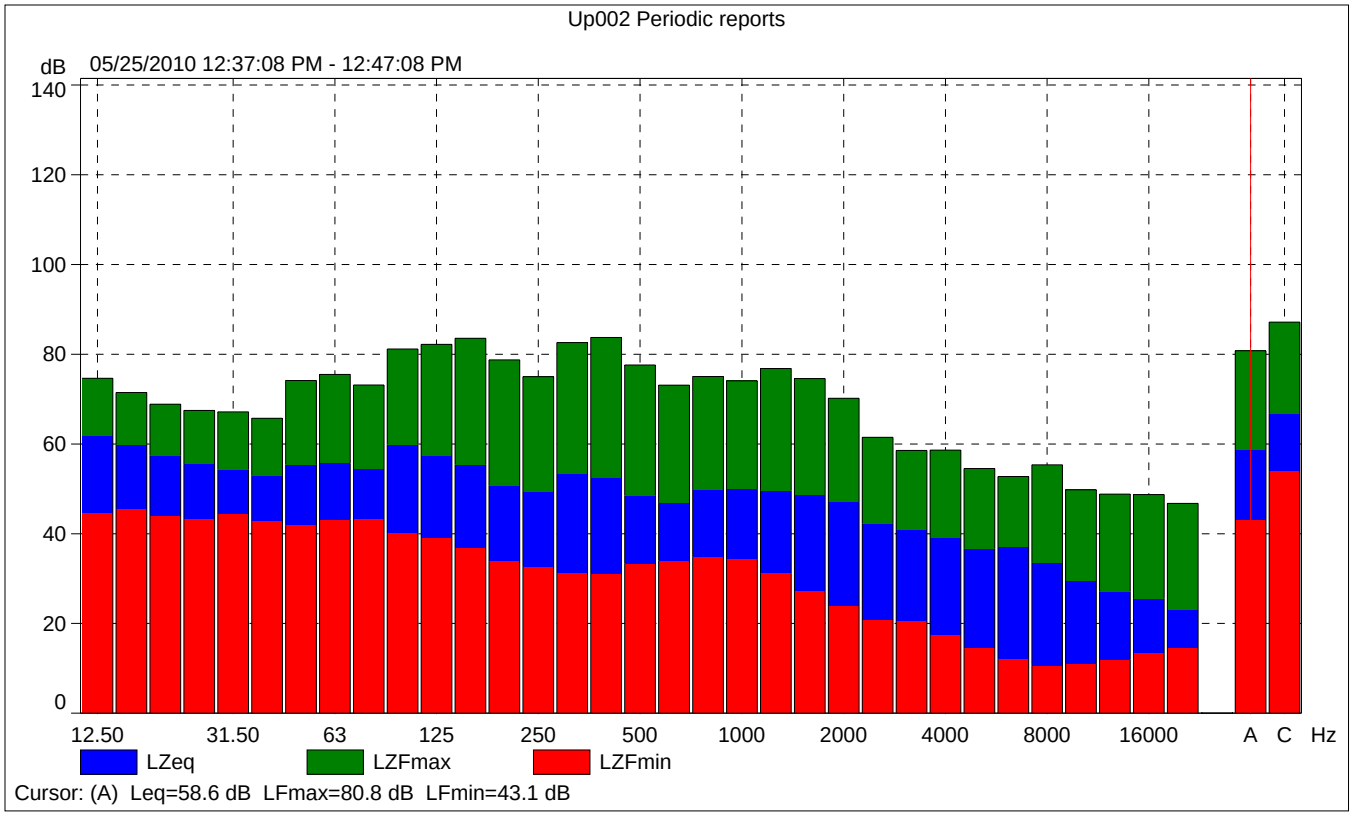

Up002
dB
05/25/2010 12:42:07 PM - 12:42:08 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=47.2 dB LFmax=48.5 dB LFmin=46.7 dB

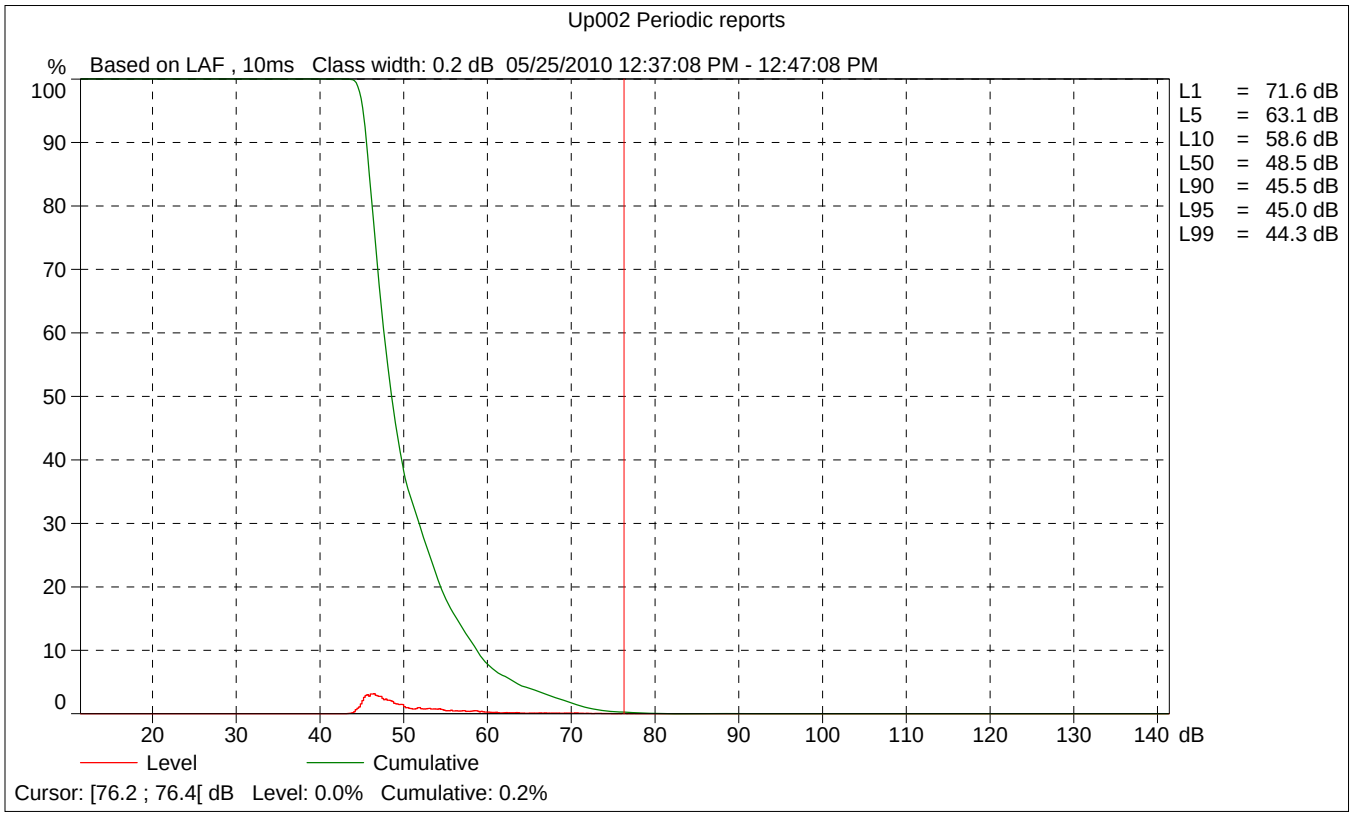

Up002
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:42:07 PM - 12:42:08 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 48.4 dB
L5 = 48.3 dB
L10 = 48.1 dB
L50 = 47.3 dB
L90 = 46.9 dB
L95 = 46.8 dB
L99 = 46.8 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%

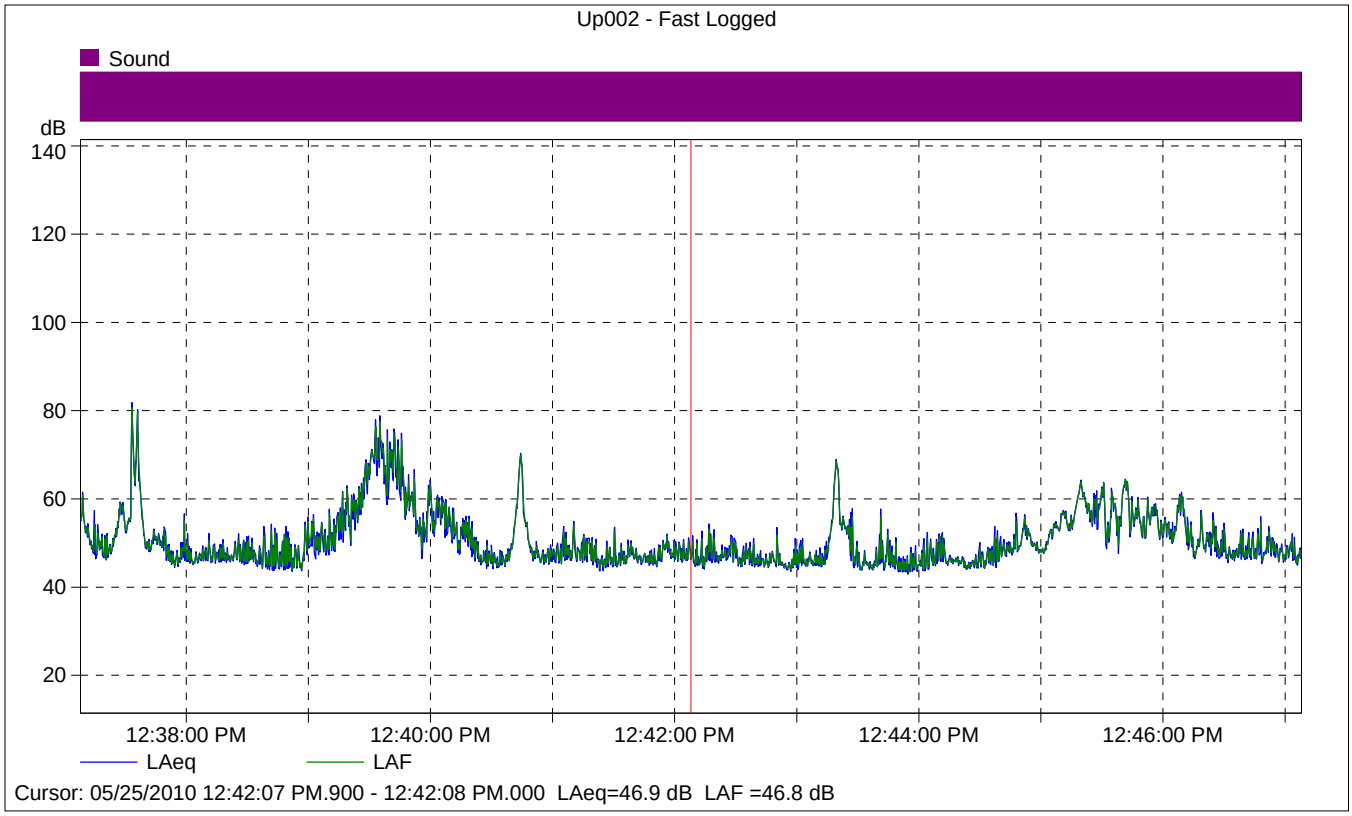


Up002 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	62.5	80.8	43.1
Time	12:37:08 PM	0:10:00				
Date	05/25/2010					


Up002 Periodic reports
dB
05/25/2010 12:37:08 PM - 12:47:08 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=58.6 dB LFmax=80.8 dB LFmin=43.1 dB


Up002 Periodic reports
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 12:37:08 PM - 12:47:08 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 71.6 dB
L5 = 63.1 dB
L10 = 58.6 dB
L50 = 48.5 dB
L90 = 45.5 dB
L95 = 45.0 dB
L99 = 44.3 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.2%



Up002 - Fast Logged

	Start time	Elapsed time	LAeq [dB]
Value			46.9
Time	12:42:07 PM.900	0:00:00.100	
Date	05/25/2010		

Site Number: Up003			
Recorded By: John Shetland			
Job Number: 10-107289			
Date: 5/25/10			
Time: 1:20 p.m.			
Location: Stowell Street and Soltana Ave. (approximately 100 feet from Metro platform)			
Source of Peak Noise: Construction of Upland train station; Metrolink			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
64.9	47.2	82.4	104.3

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**2548189**	**11/14/2007**	
	Microphone	**Brüel & Kjær**	**4189**	**2543364**	**11/15/2007**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**4265**	**7/18/2006**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**7/31/2006**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** ☼
	Note: dBA Offset =		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	1.4	77.5	971.6

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 2.0.2
Start Time:		05/25/2010 13:18:59
End Time:		05/25/2010 13:28:59
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		140.15

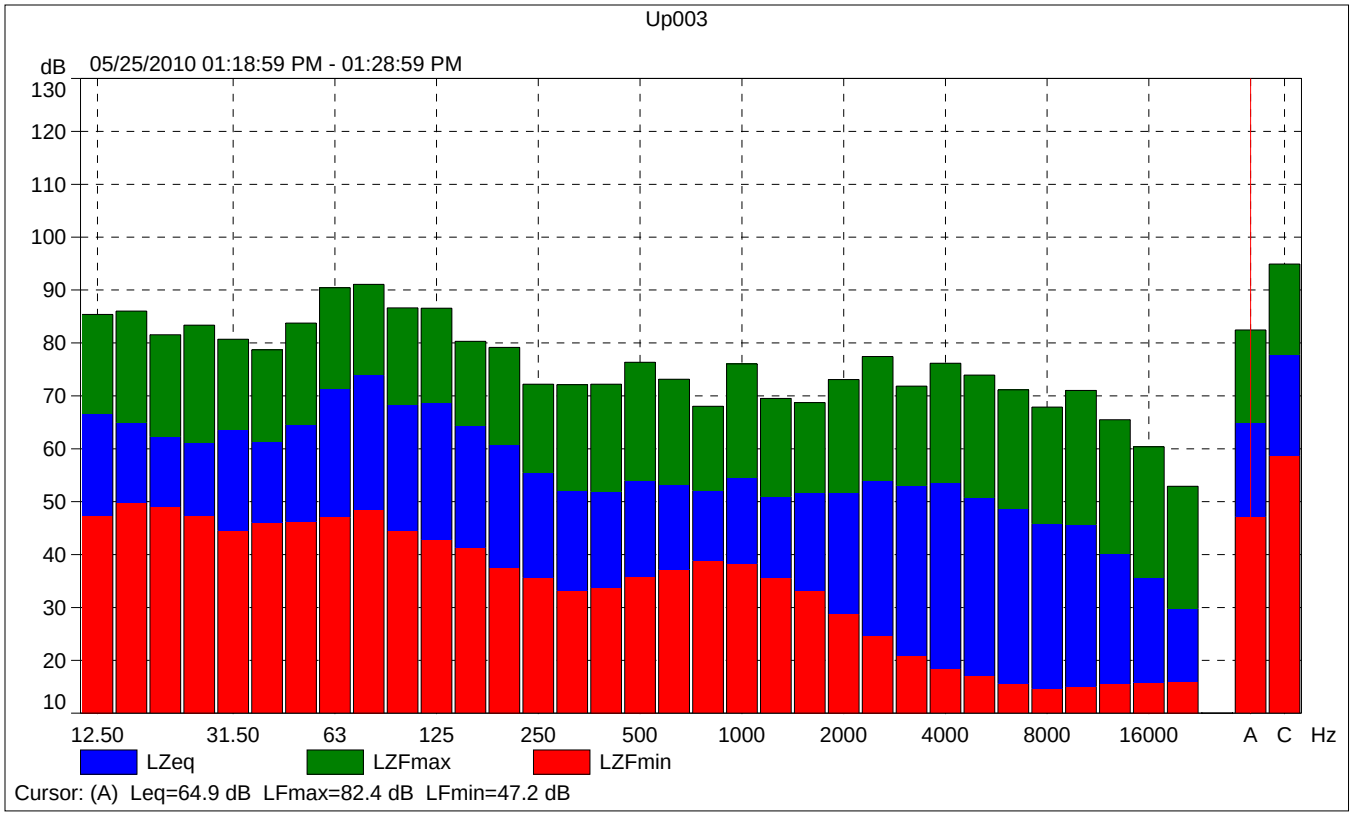
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

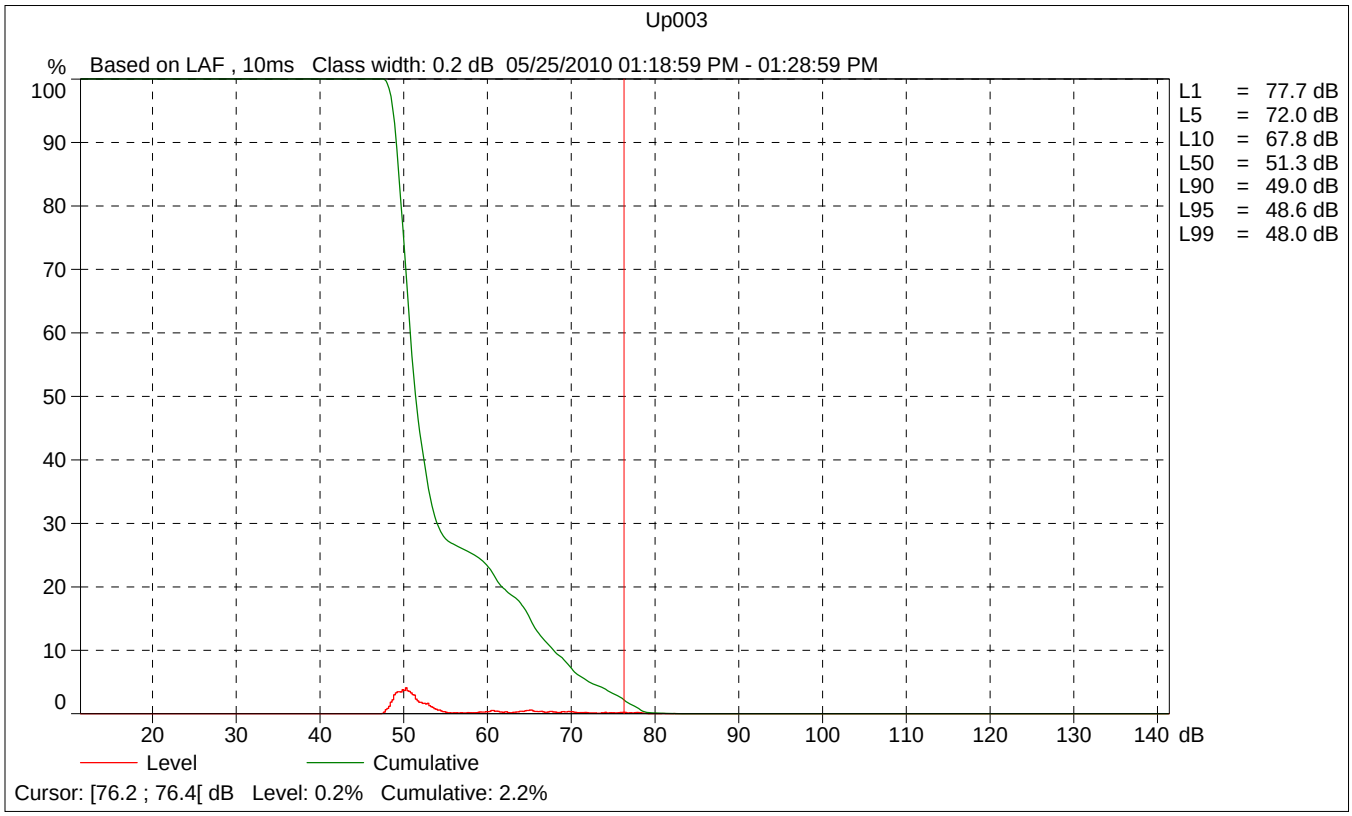
Instrument Serial Number:		2548189
Microphone Serial Number:		2543364
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Diffuse-field

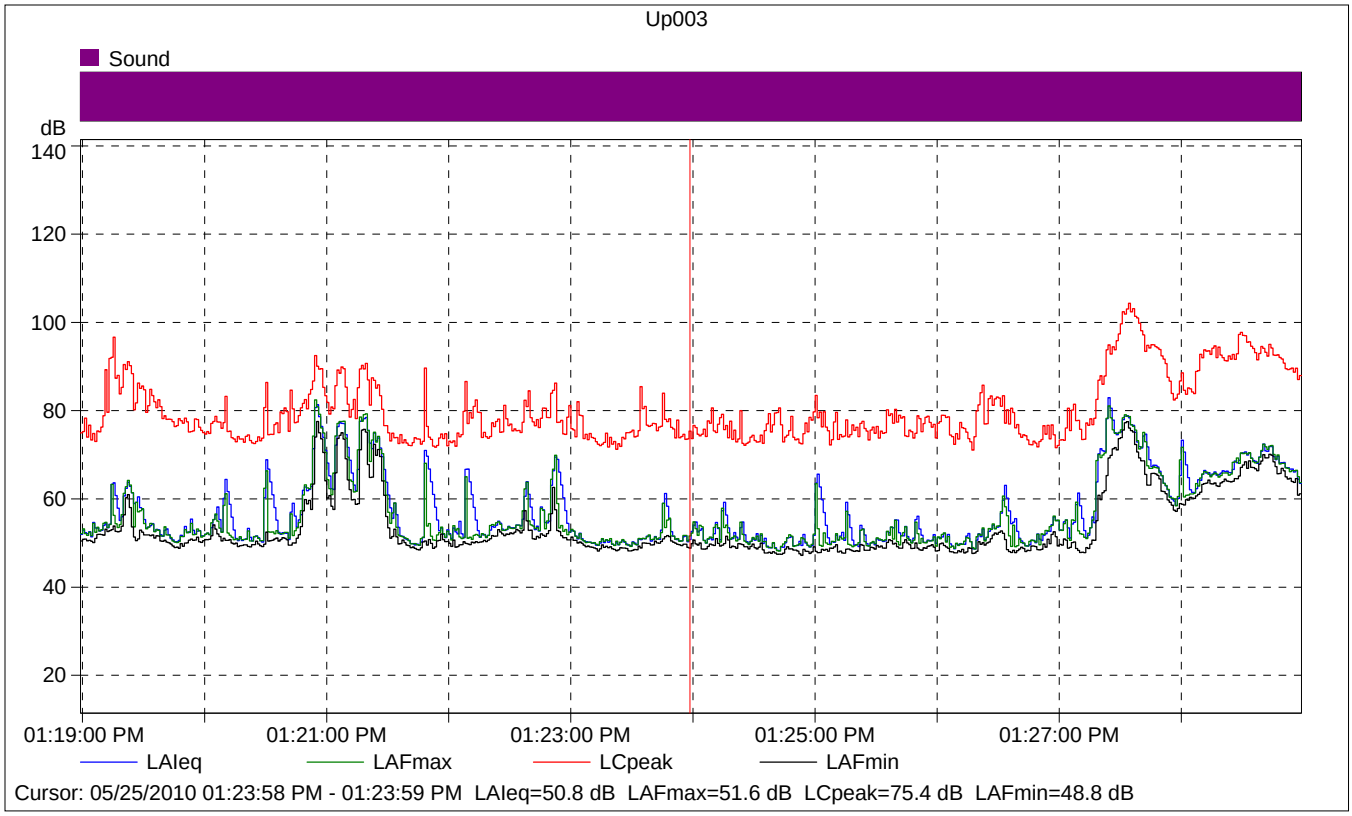
Calibration Time:		05/24/2010 16:09:52
Calibration Type:		External reference
Sensitivity:		54.72 mV/Pa

Up003

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	64.9	82.4	47.2
Time	01:18:59 PM	01:28:59 PM	0:10:00				
Date	05/25/2010	05/25/2010					

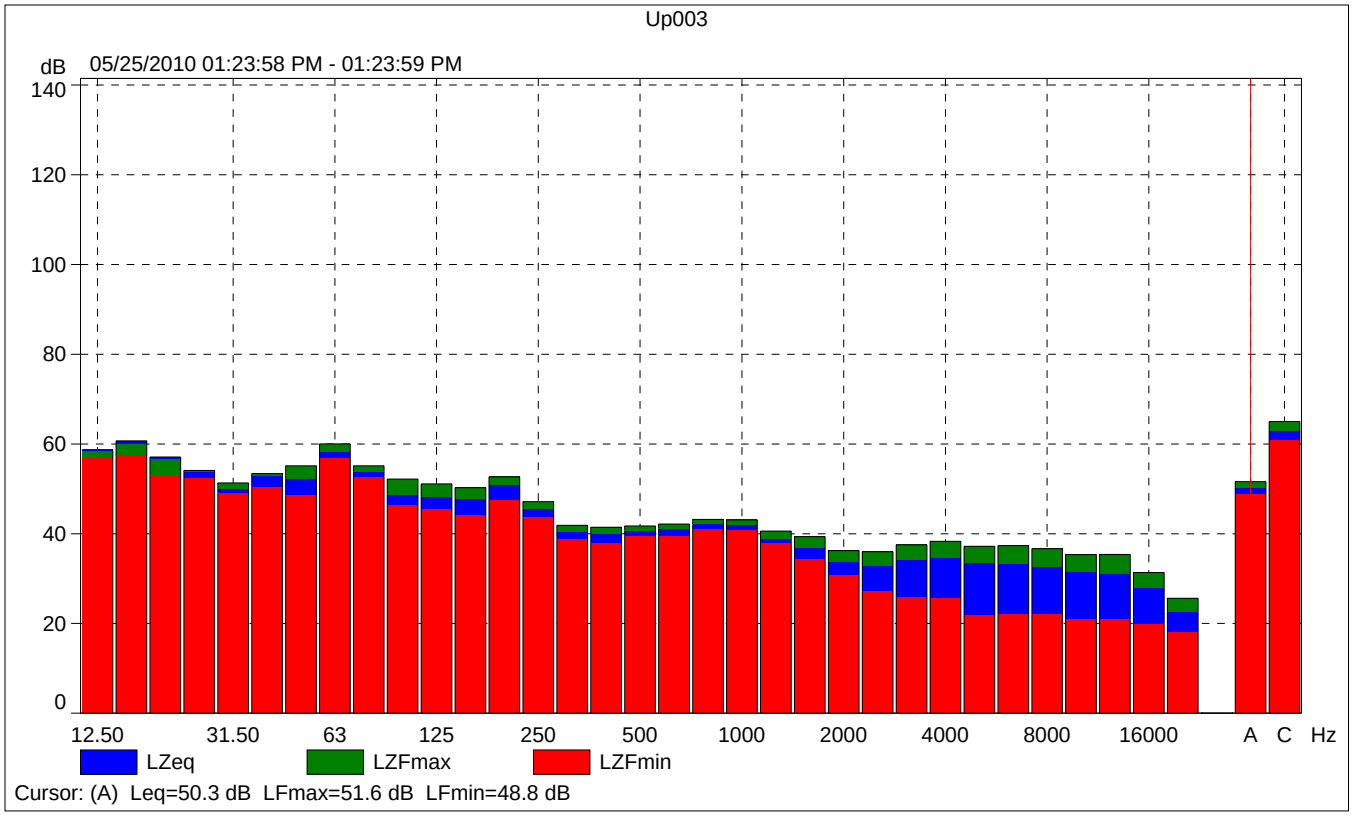

Up003
dB
05/25/2010 01:18:59 PM - 01:28:59 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=64.9 dB LFmax=82.4 dB LFmin=47.2 dB

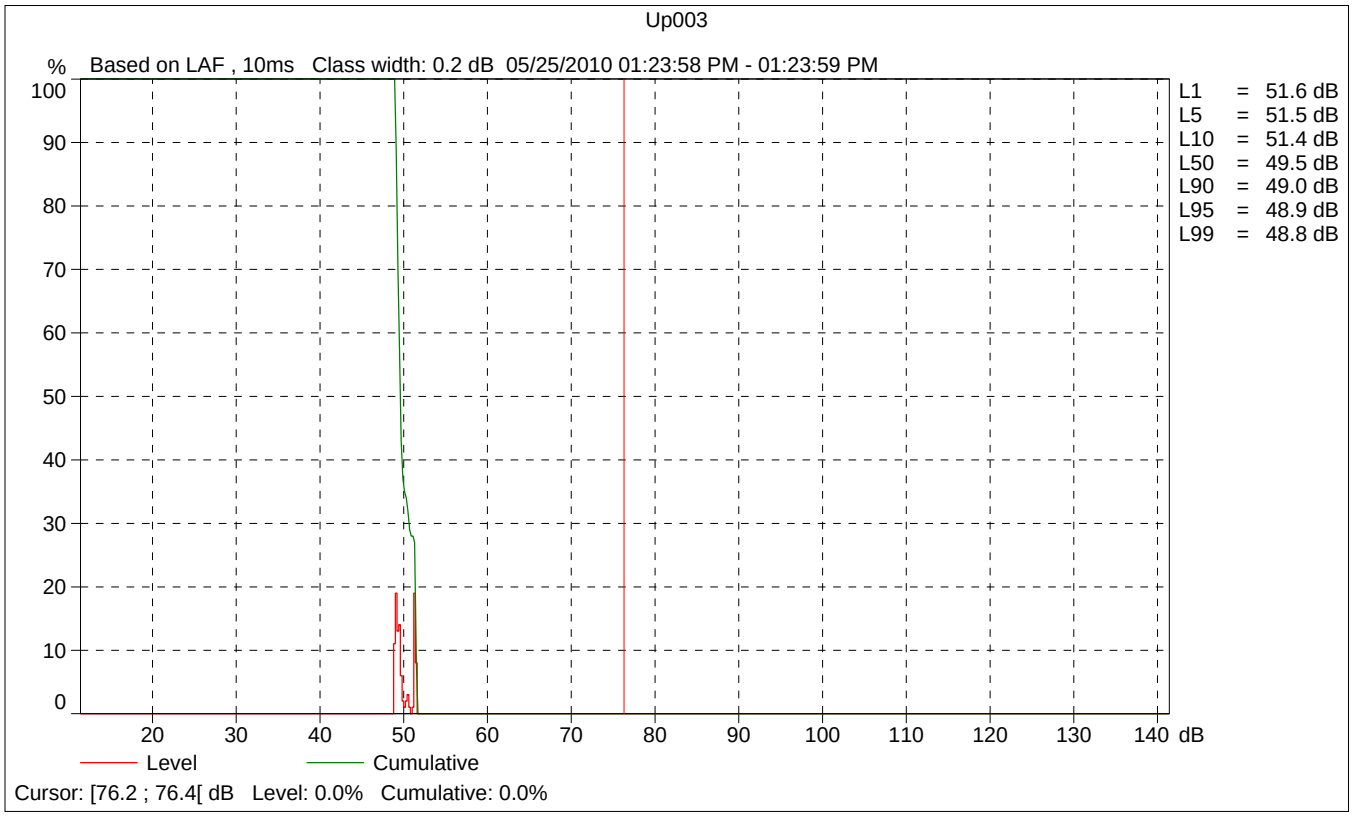

Up003
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:18:59 PM - 01:28:59 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 77.7 dB
L5 = 72.0 dB
L10 = 67.8 dB
L50 = 51.3 dB
L90 = 49.0 dB
L95 = 48.6 dB
L99 = 48.0 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.2% Cumulative: 2.2%

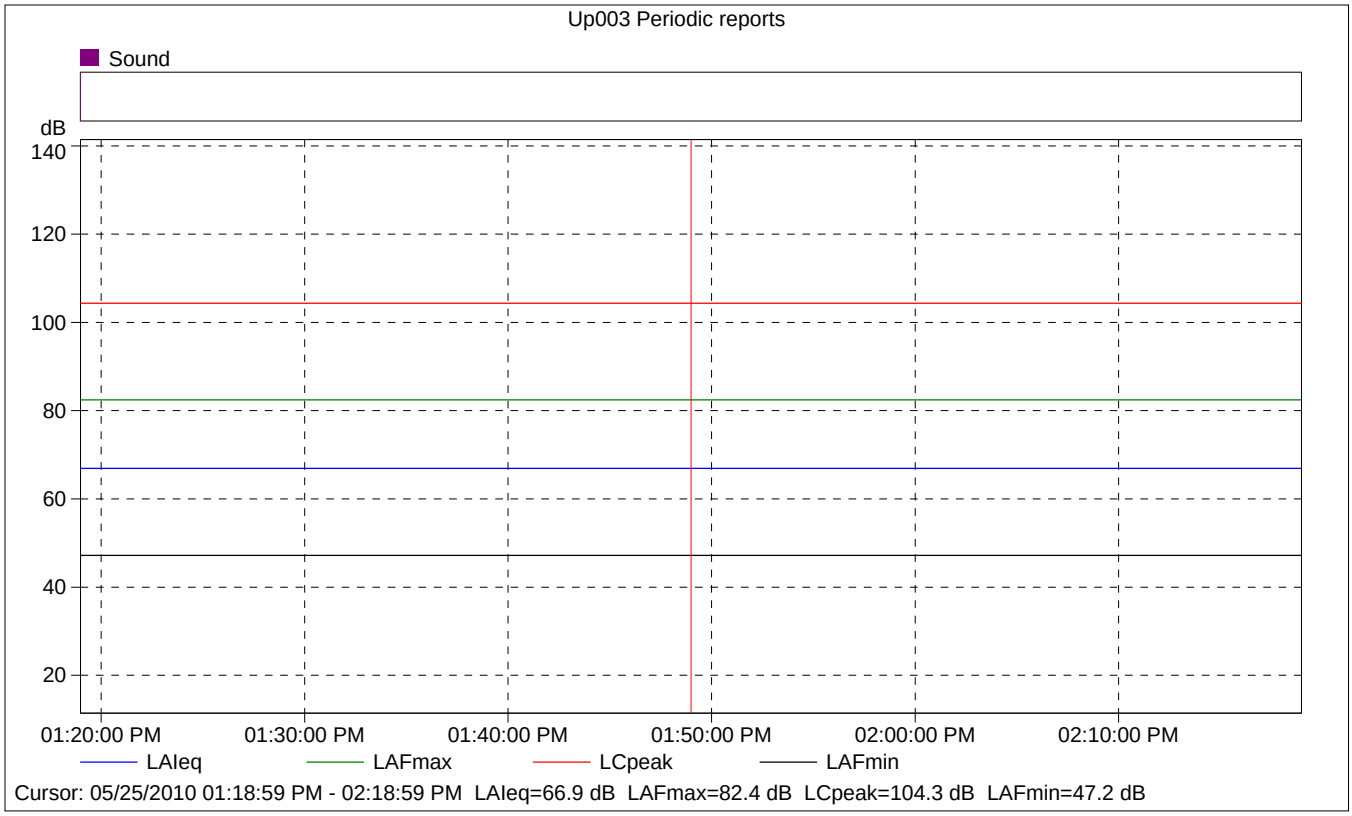


Up003

	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			50.8	51.6	48.8
Time	01:23:58 PM	0:00:01			
Date	05/25/2010				

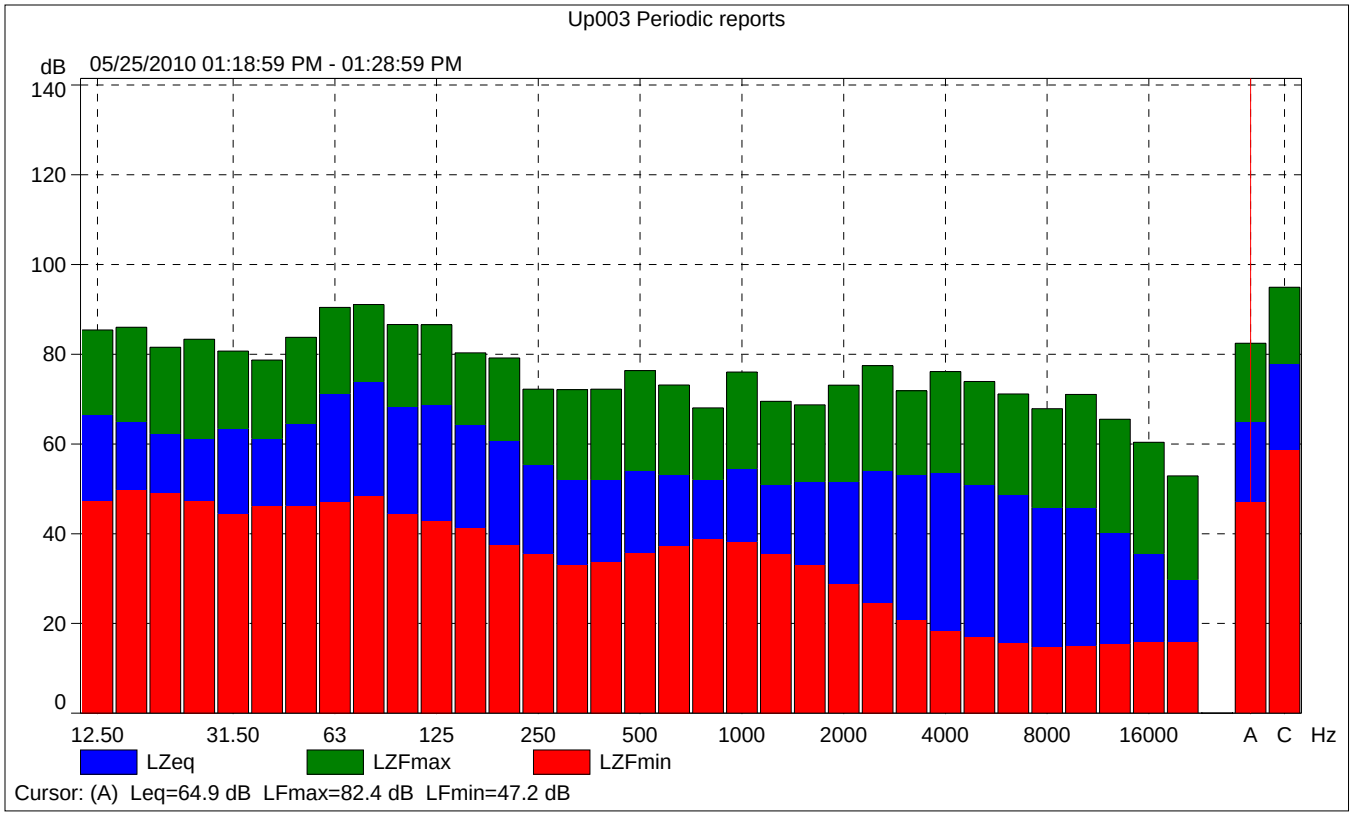

Up003
dB
05/25/2010 01:23:58 PM - 01:23:59 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=50.3 dB LFmax=51.6 dB LFmin=48.8 dB

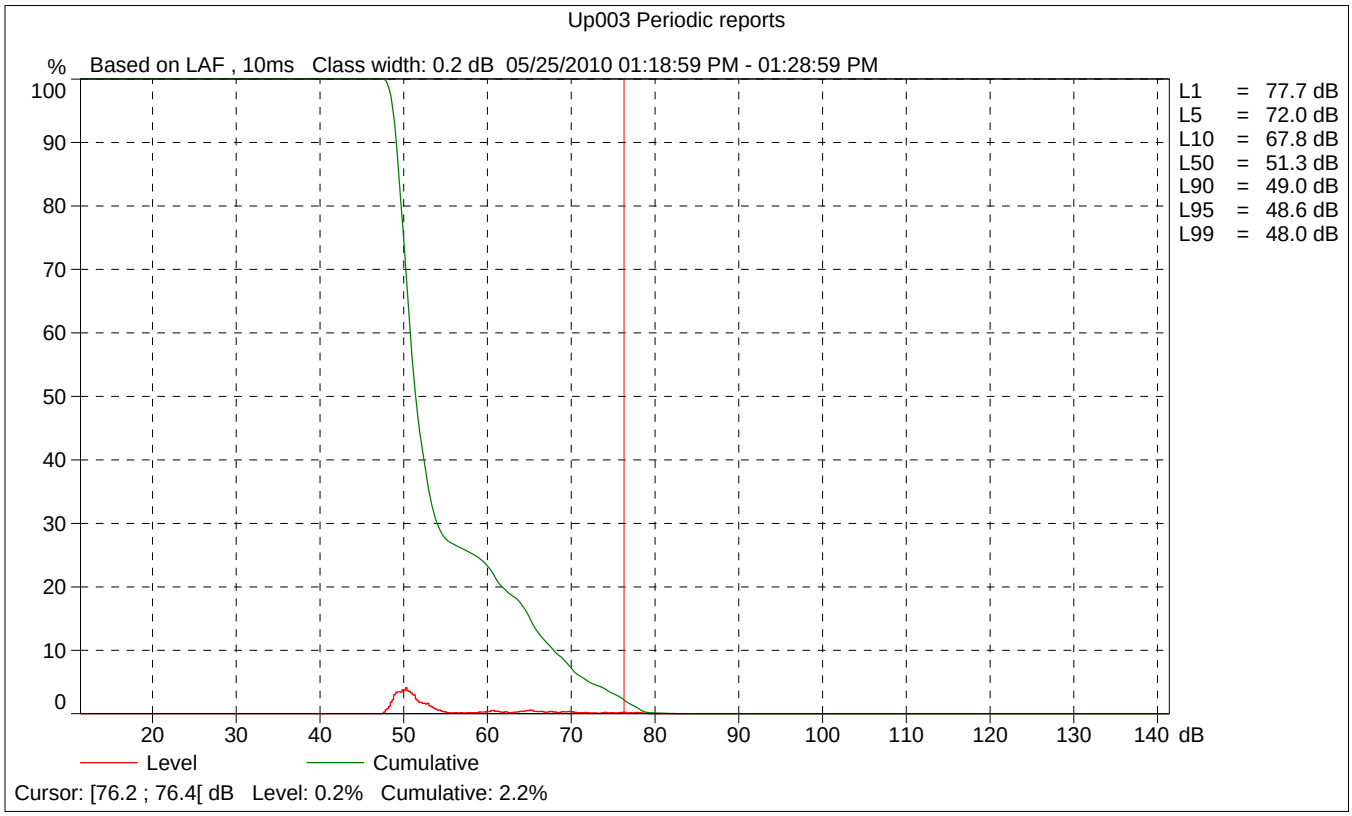

Up003
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:23:58 PM - 01:23:59 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 51.6 dB
L5 = 51.5 dB
L10 = 51.4 dB
L50 = 49.5 dB
L90 = 49.0 dB
L95 = 48.9 dB
L99 = 48.8 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%

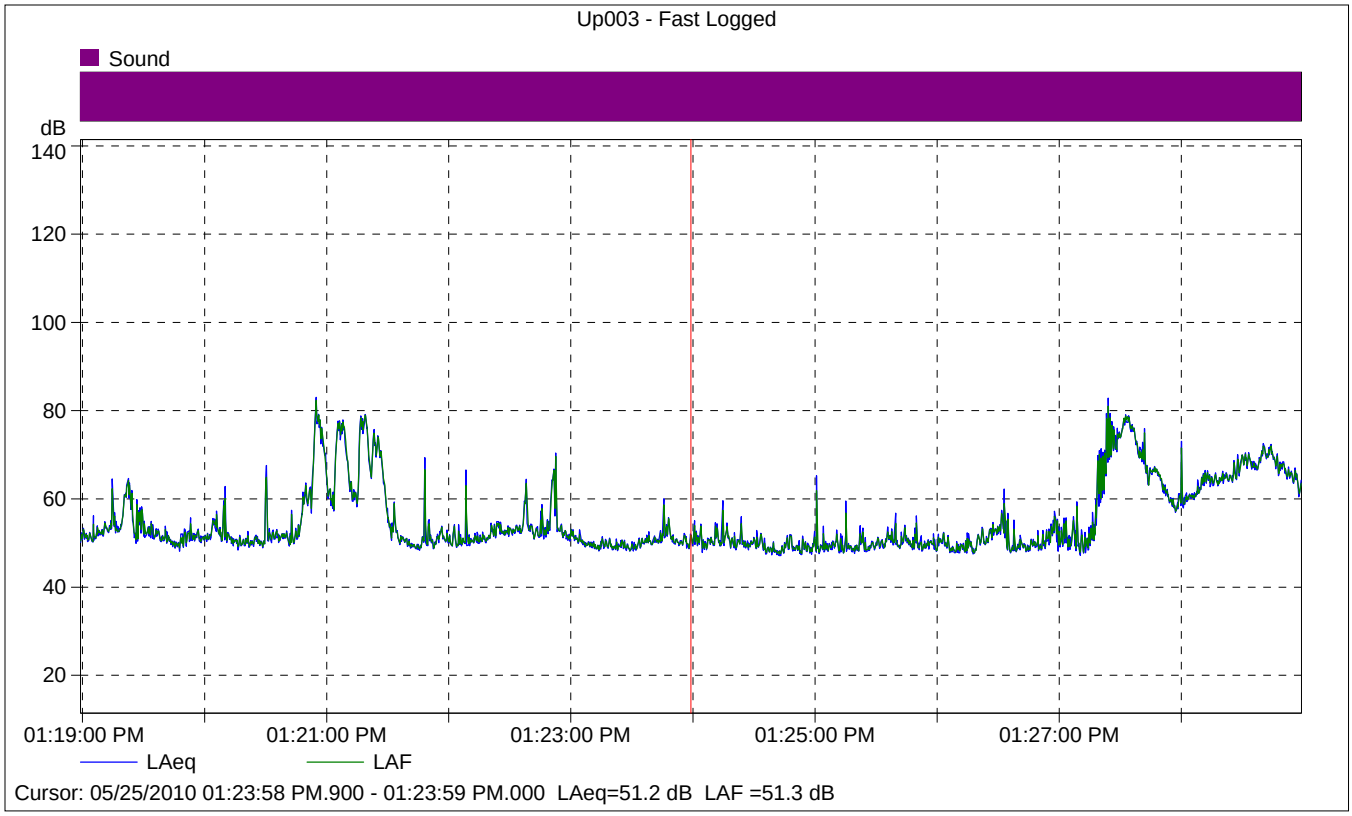


Up003 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	66.9	82.4	47.2
Time	01:18:59 PM	0:10:00				
Date	05/25/2010					


Up003 Periodic reports
dB
05/25/2010 01:18:59 PM - 01:28:59 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=64.9 dB LFmax=82.4 dB LFmin=47.2 dB


Up003 Periodic reports
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:18:59 PM - 01:28:59 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 77.7 dB
L5 = 72.0 dB
L10 = 67.8 dB
L50 = 51.3 dB
L90 = 49.0 dB
L95 = 48.6 dB
L99 = 48.0 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.2% Cumulative: 2.2%



Up003 - Fast Logged

	Start time	Elapsed time	LAeq [dB]
Value			51.2
Time	01:23:58 PM.900	0:00:00.100	
Date	05/25/2010		

Site Number: Up004			
Recorded By: John Shetland			
Job Number: 10-107289			
Date: 5/25/10			
Time: 1:40 p.m.			
Location: Southwest corner of Euclid and 9th Street			
Source of Peak Noise: Vehicles			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
70.5	54.7	89.2	105.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**2548189**	**11/14/2007**	
	Microphone	**Brüel & Kjær**	**4189**	**2543364**	**11/15/2007**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**4265**	**7/18/2006**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**7/31/2006**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** ☼
	Note: dBA Offset =		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	2.9	70.6	971.1

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 2.0.2
Start Time:		05/25/2010 13:38:40
End Time:		05/25/2010 13:48:40
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		140.15

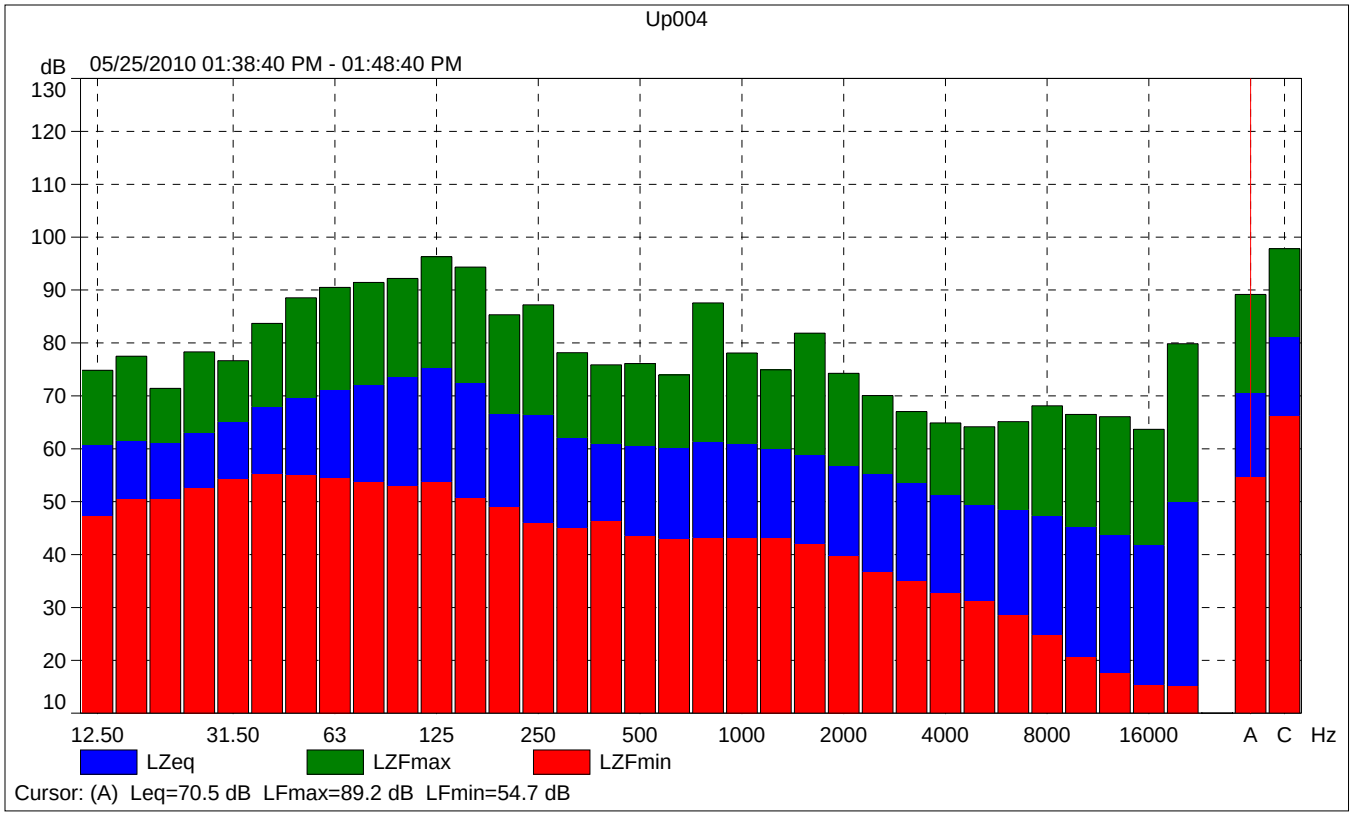
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

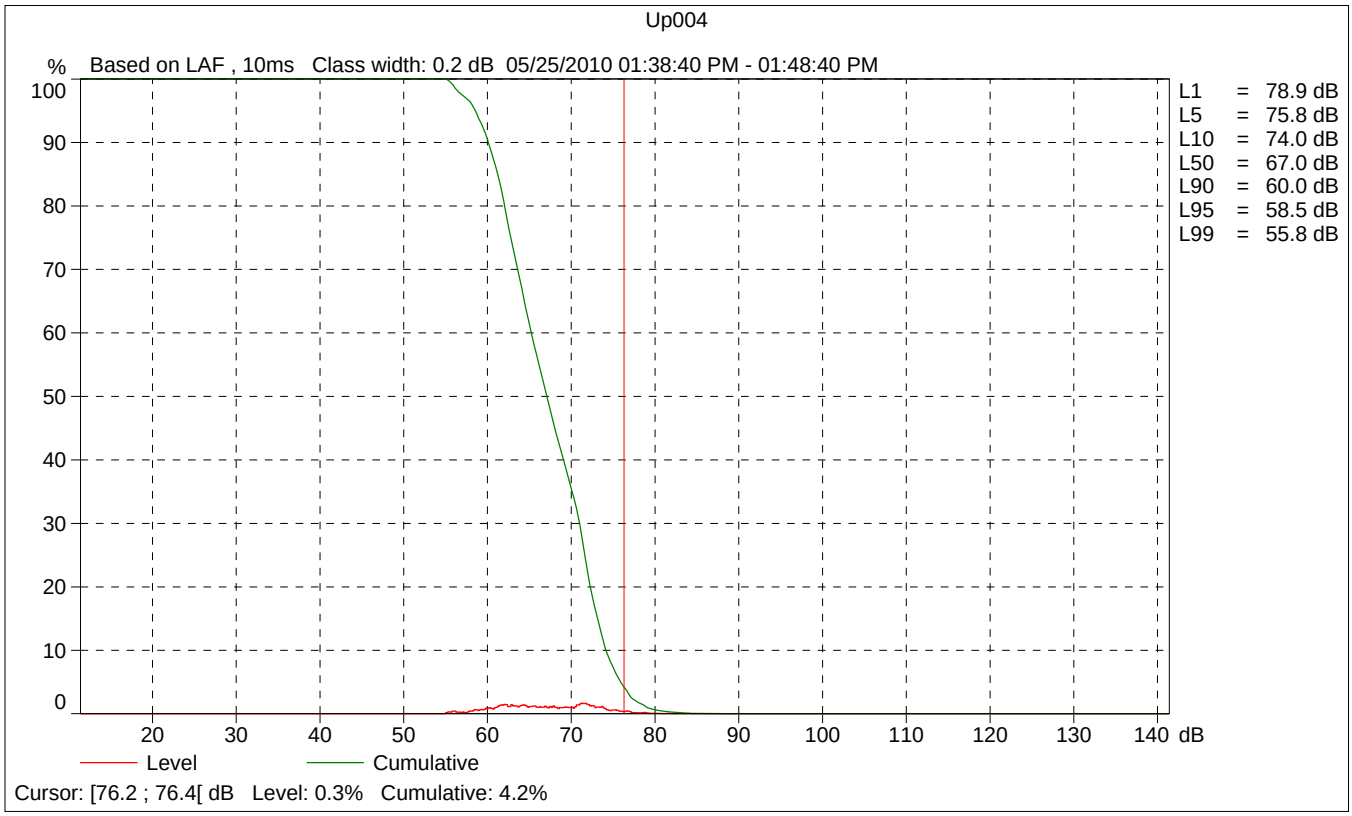
Instrument Serial Number:		2548189
Microphone Serial Number:		2543364
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Diffuse-field

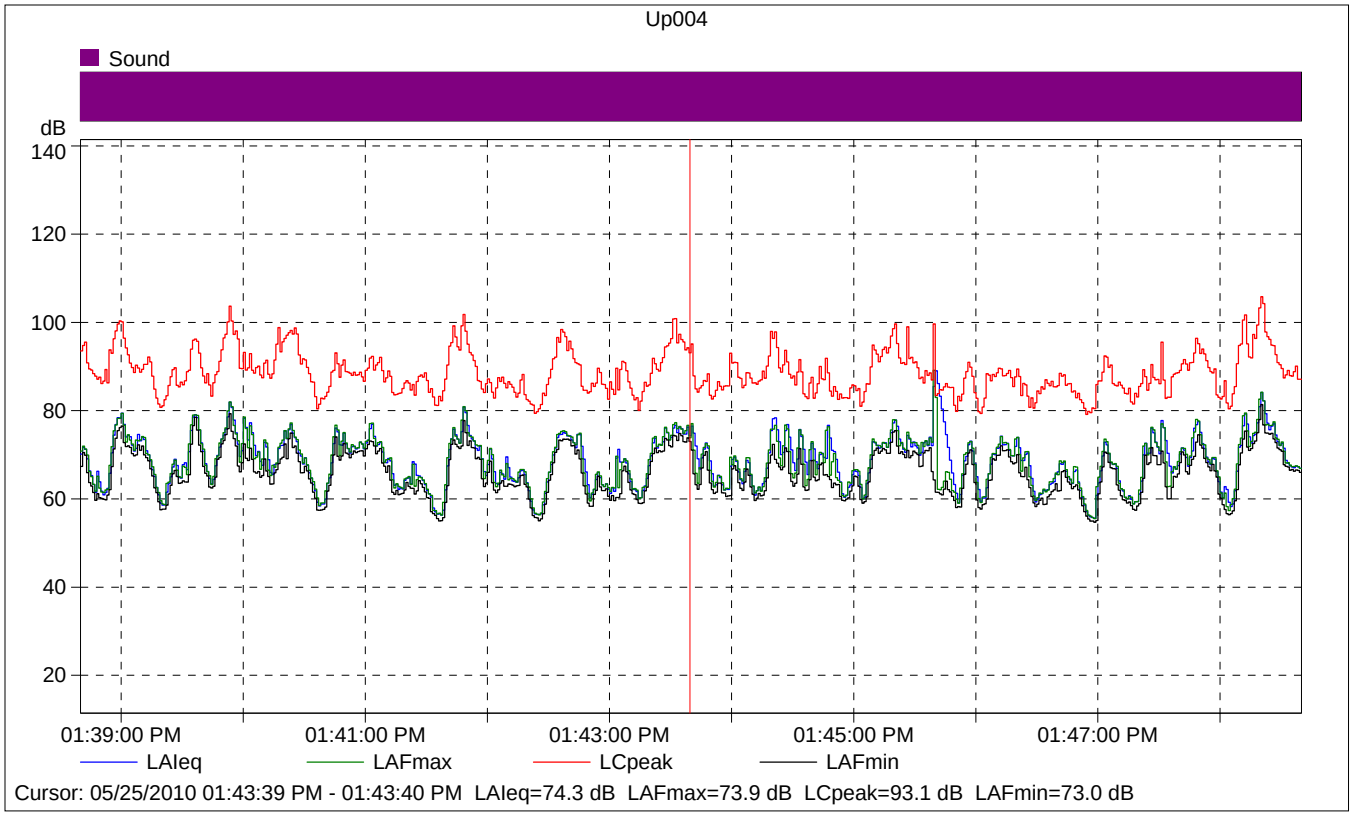
Calibration Time:		05/24/2010 16:09:52
Calibration Type:		External reference
Sensitivity:		54.72 mV/Pa

Up004

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	70.5	89.2	54.7
Time	01:38:40 PM	01:48:40 PM	0:10:00				
Date	05/25/2010	05/25/2010					

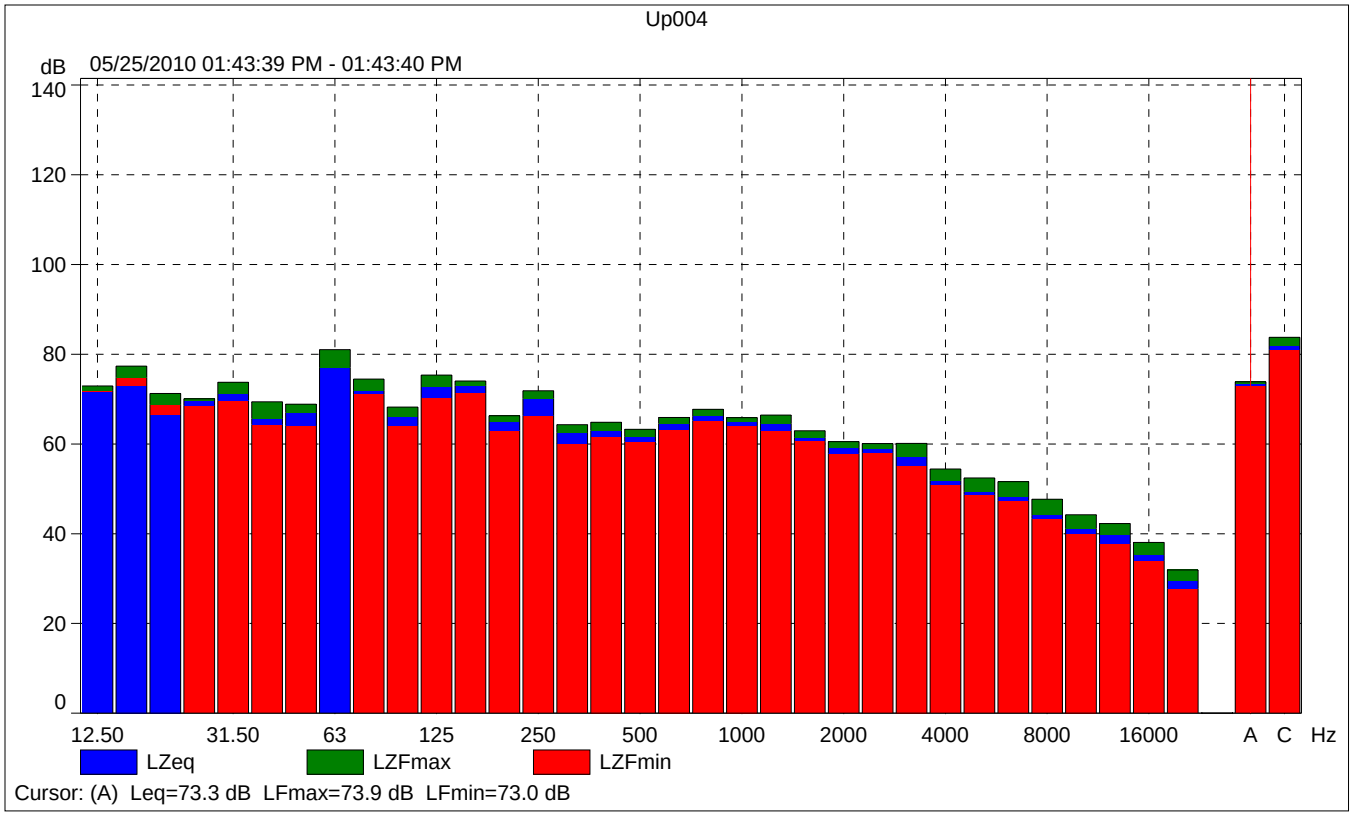

Up004
dB
05/25/2010 01:38:40 PM - 01:48:40 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=70.5 dB LFmax=89.2 dB LFmin=54.7 dB

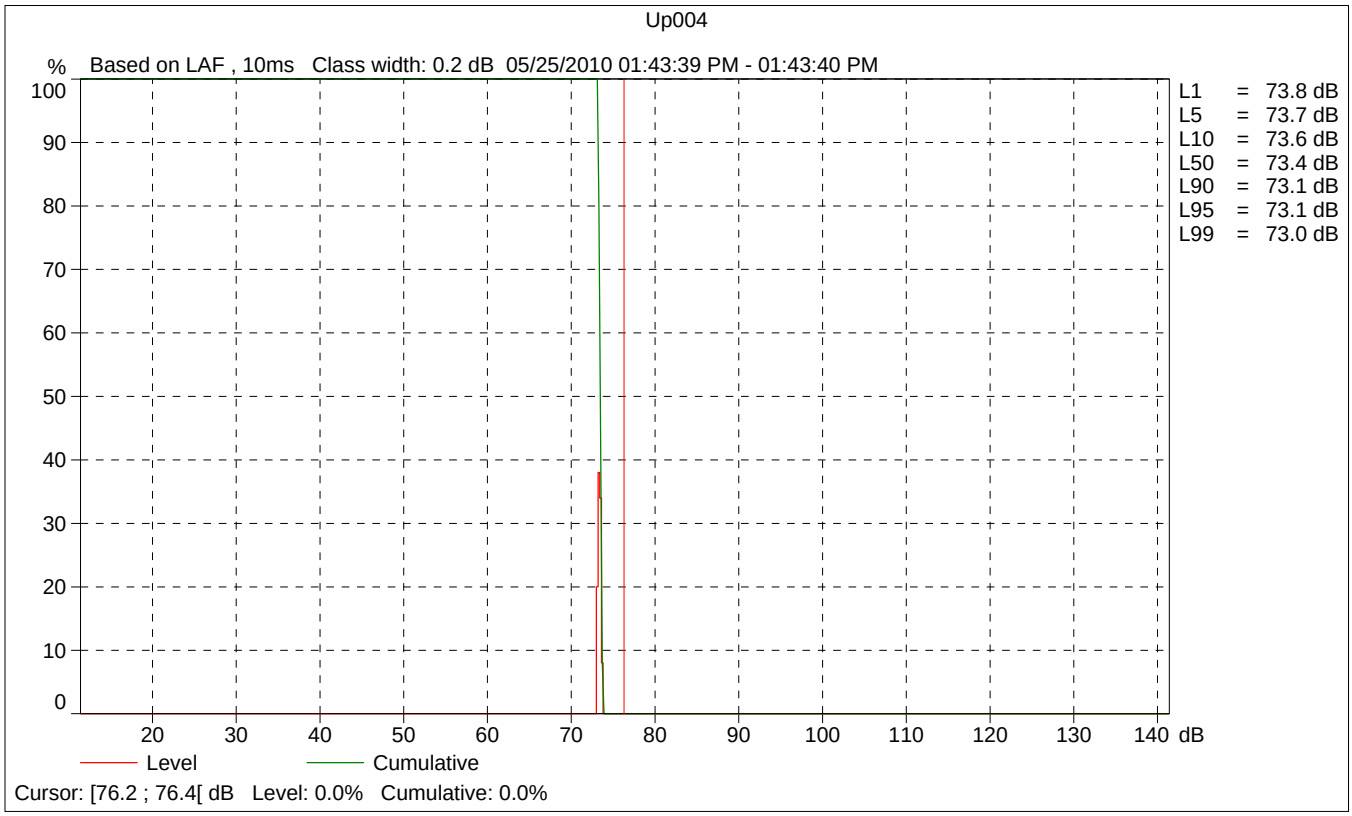

Up004
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:38:40 PM - 01:48:40 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 78.9 dB
L5 = 75.8 dB
L10 = 74.0 dB
L50 = 67.0 dB
L90 = 60.0 dB
L95 = 58.5 dB
L99 = 55.8 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.3% Cumulative: 4.2%

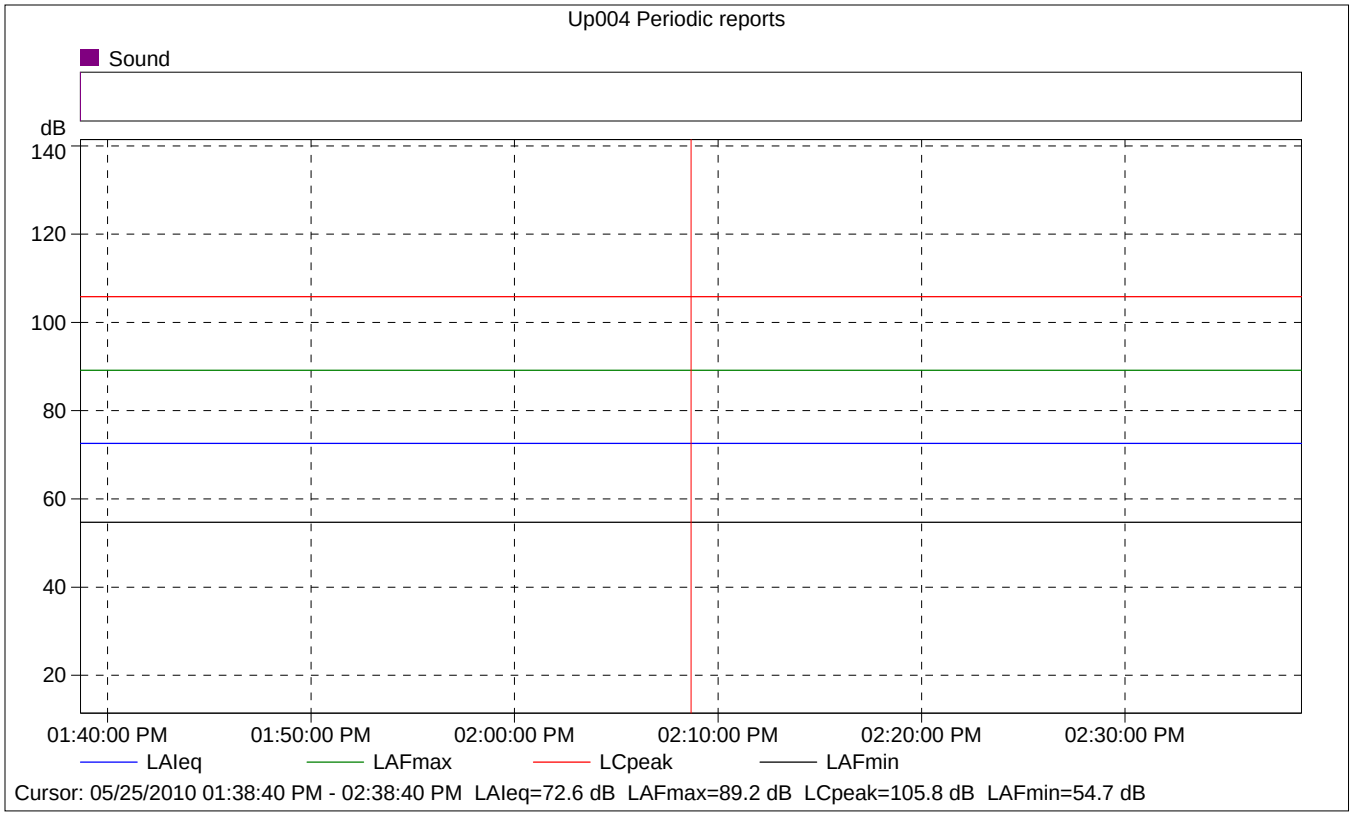


Up004

	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			74.3	73.9	73.0
Time	01:43:39 PM	0:00:01			
Date	05/25/2010				

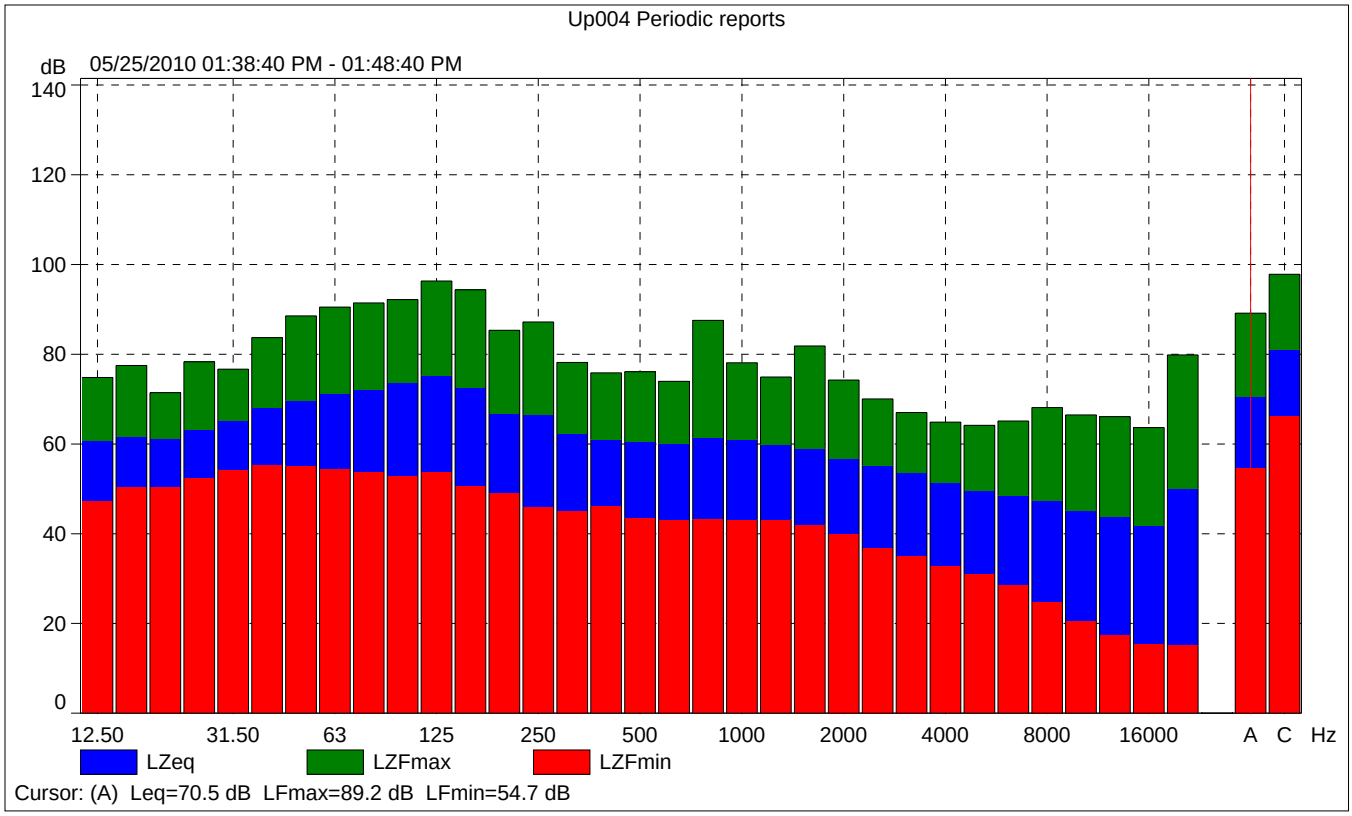

Up004
dB
05/25/2010 01:43:39 PM - 01:43:40 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=73.3 dB LFmax=73.9 dB LFmin=73.0 dB

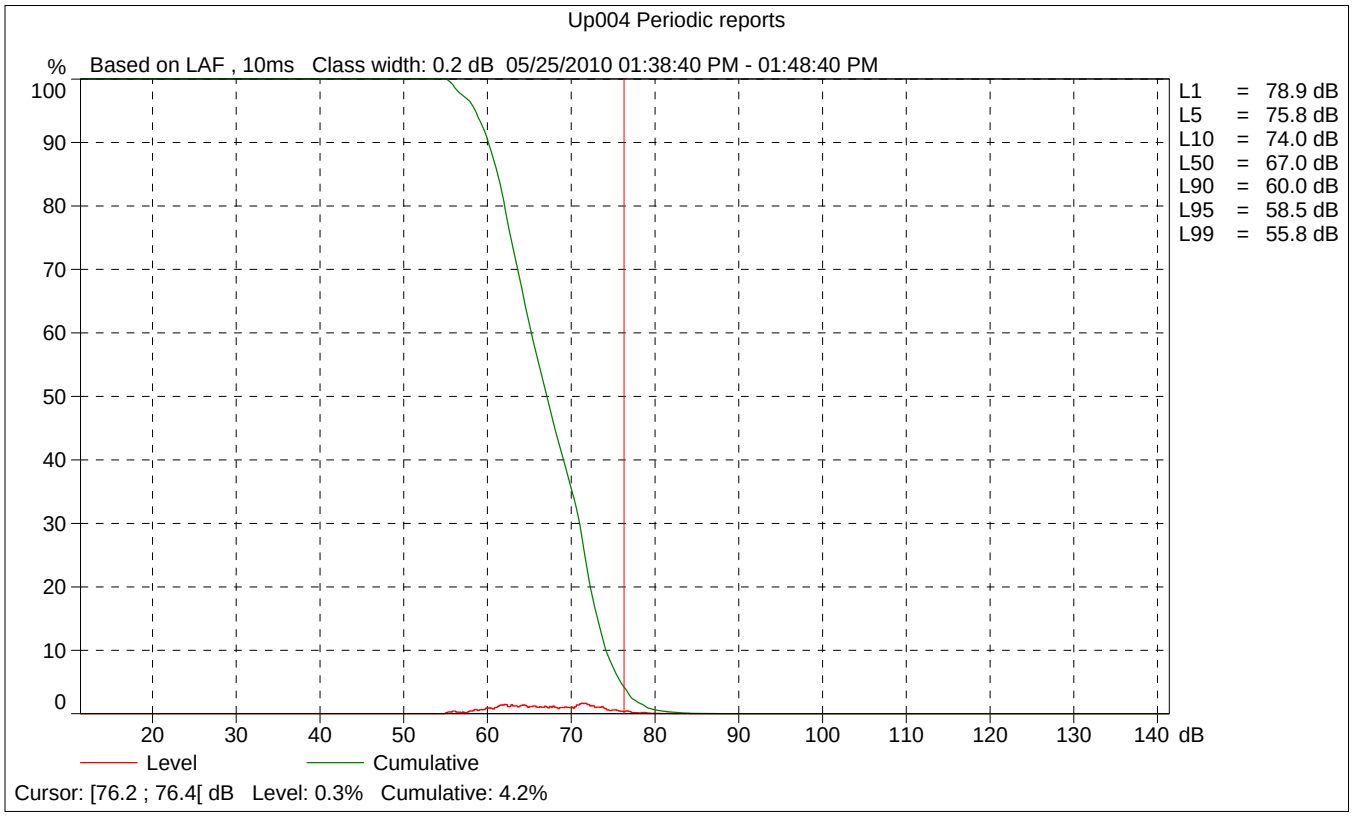

Up004
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:43:39 PM - 01:43:40 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 73.8 dB
L5 = 73.7 dB
L10 = 73.6 dB
L50 = 73.4 dB
L90 = 73.1 dB
L95 = 73.1 dB
L99 = 73.0 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%

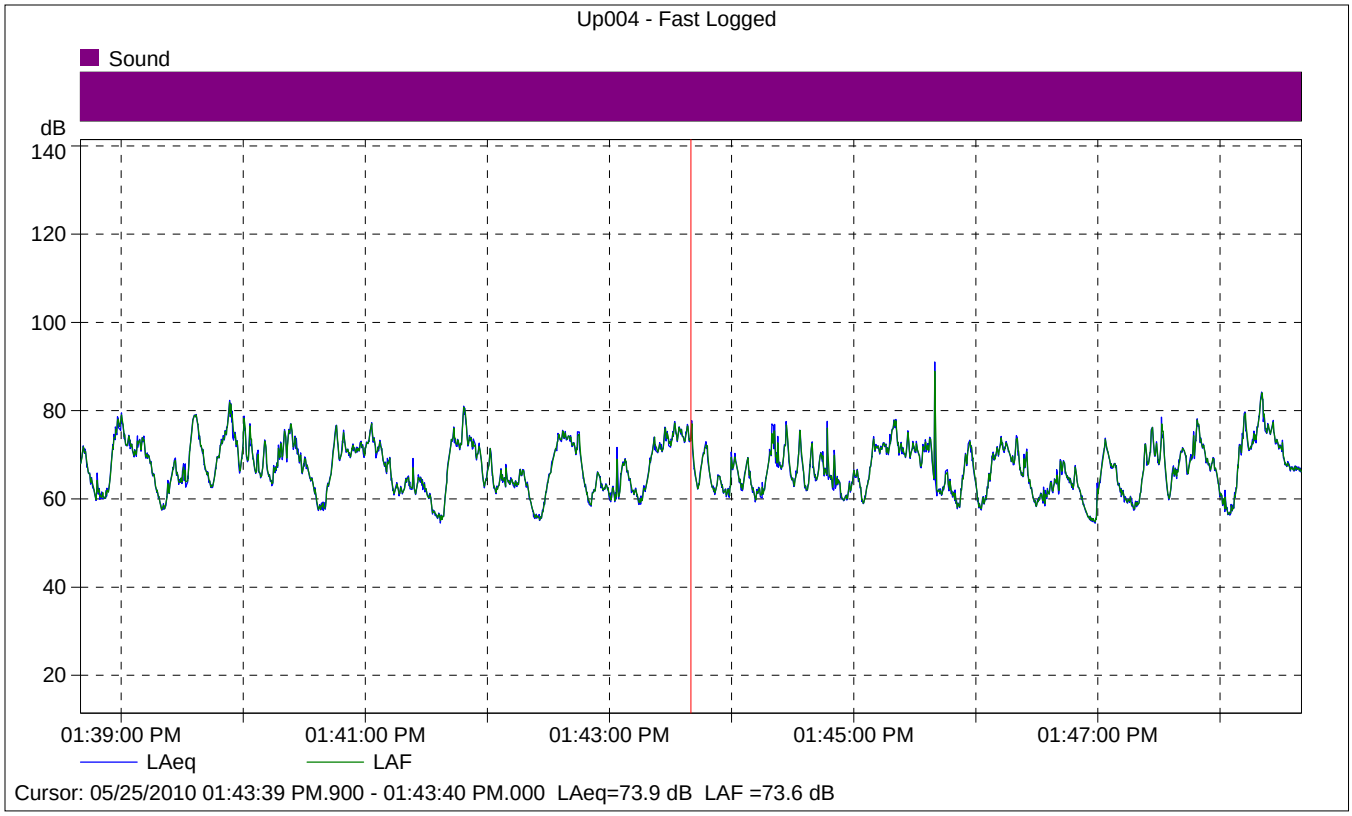


Up004 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	72.6	89.2	54.7
Time	01:38:40 PM	0:10:00				
Date	05/25/2010					


Up004 Periodic reports
dB
05/25/2010 01:38:40 PM - 01:48:40 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=70.5 dB LFmax=89.2 dB LFmin=54.7 dB


Up004 Periodic reports
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:38:40 PM - 01:48:40 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 78.9 dB
L5 = 75.8 dB
L10 = 74.0 dB
L50 = 67.0 dB
L90 = 60.0 dB
L95 = 58.5 dB
L99 = 55.8 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.3% Cumulative: 4.2%



Up004 - Fast Logged

	Start time	Elapsed time	LAeq [dB]
Value			73.9
Time	01:43:39 PM.900	0:00:00.100	
Date	05/25/2010		

Site Number: Up005			
Recorded By: John Shetland			
Job Number: 10-107289			
Date: 5/25/10			
Time: 1:55 p.m.			
Location: Along 3rd Ave., south of C Street			
Source of Peak Noise: Vehicles; helicopter; crane; tow truck			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
64.9	47.2	82.4	104.3

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Brüel & Kjær**	**2250**	**2548189**	**11/14/2007**	
	Microphone	**Brüel & Kjær**	**4189**	**2543364**	**11/15/2007**	
	Preamp	**Brüel & Kjær**	**ZC 0032**	**4265**	**7/18/2006**	
	Calibrator	**Brüel & Kjær**	**4231**	**2545667**	**7/31/2006**	

Weather Data			
Est.	**Duration:** 10 minutes		**Sky:** ☼
	Note: dBA Offset =		**Sensor Height (ft):** 5 ft
	Wind Ave Speed (mph / m/s)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	2.2	75.8	970.7

Photo of Measurement Location

2250

Instrument:		2250
Application:		BZ7225 Version 2.0.2
Start Time:		05/25/2010 13:54:38
End Time:		05/25/2010 14:04:38
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		140.15

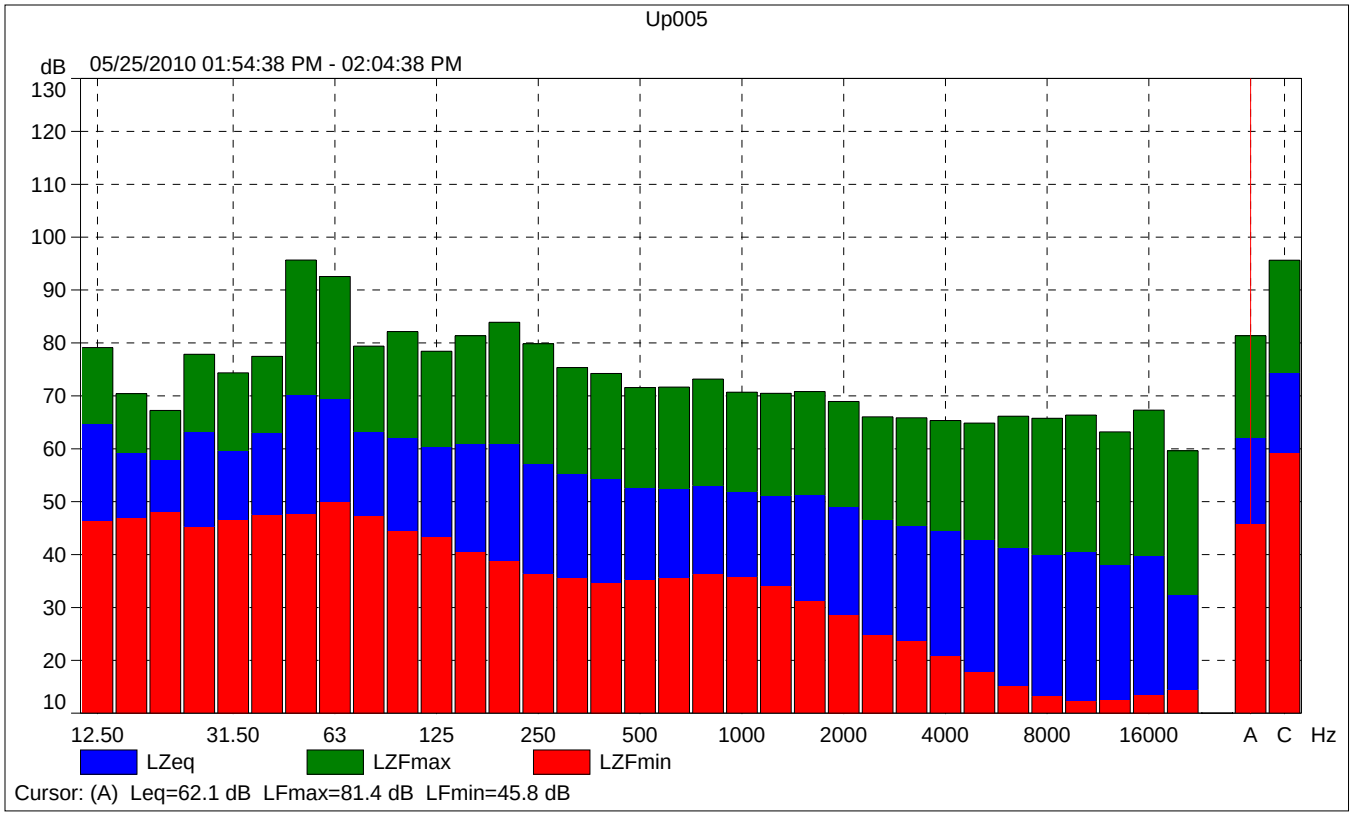
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

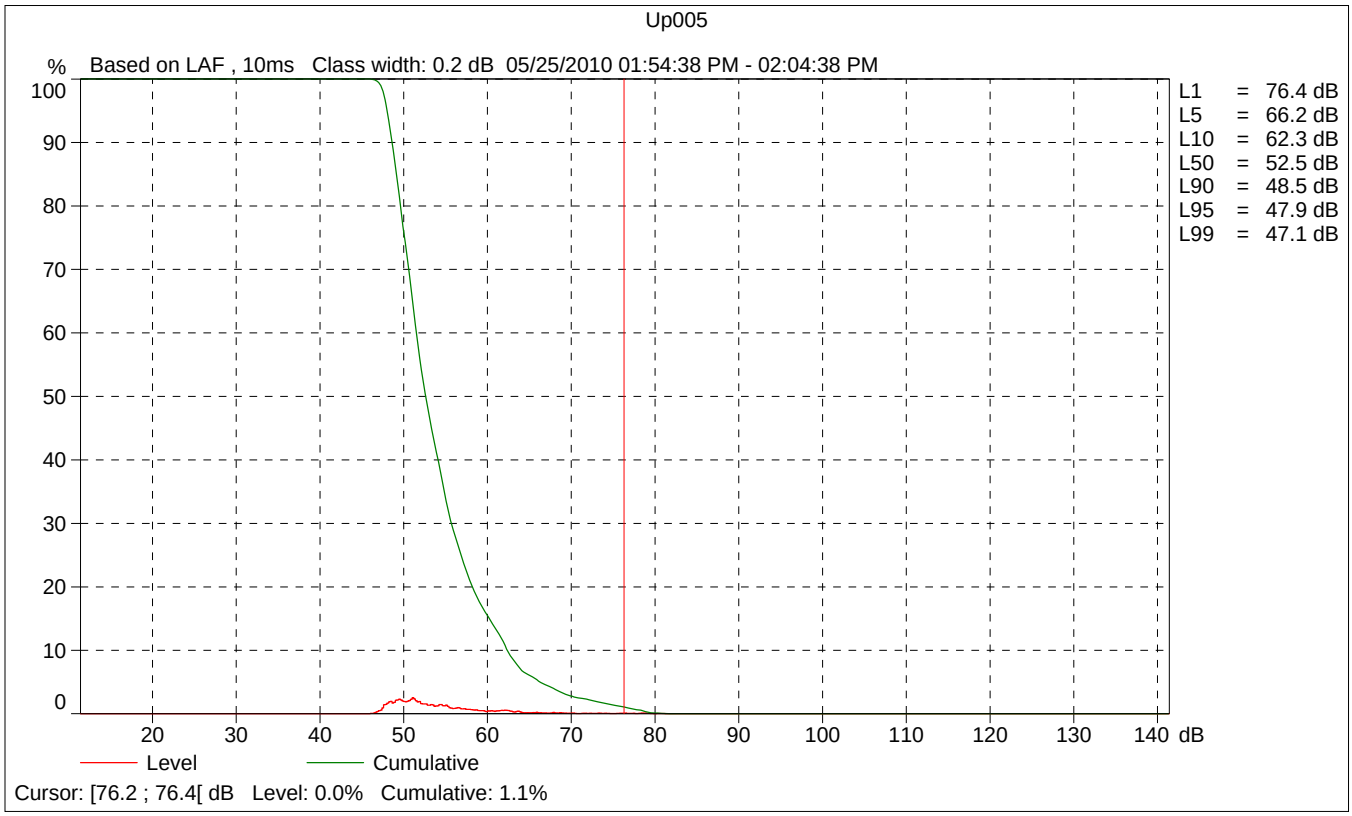
Instrument Serial Number:		2548189
Microphone Serial Number:		2543364
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Diffuse-field

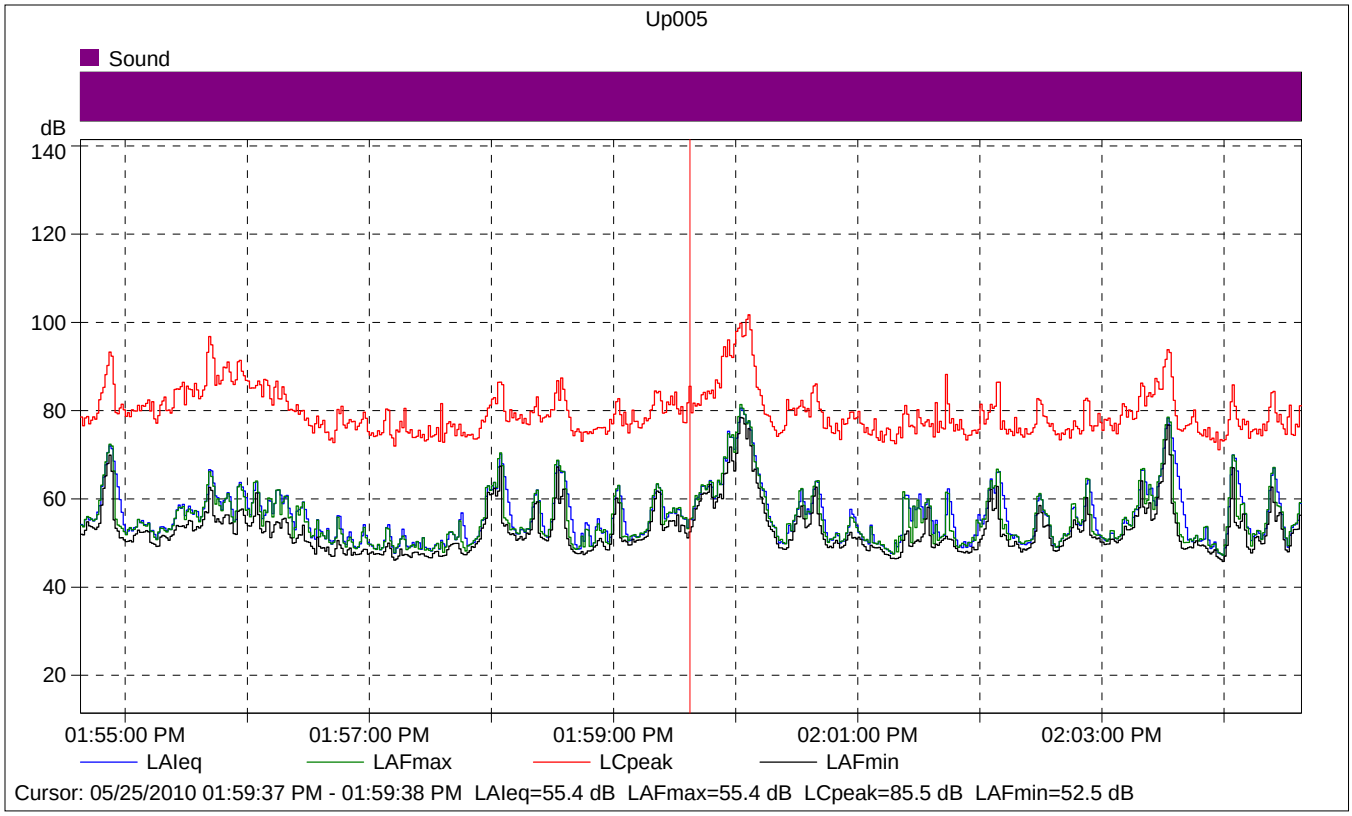
Calibration Time:		05/24/2010 16:09:52
Calibration Type:		External reference
Sensitivity:		54.72 mV/Pa

Up005

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	62.1	81.4	45.8
Time	01:54:38 PM	02:04:38 PM	0:10:00				
Date	05/25/2010	05/25/2010					

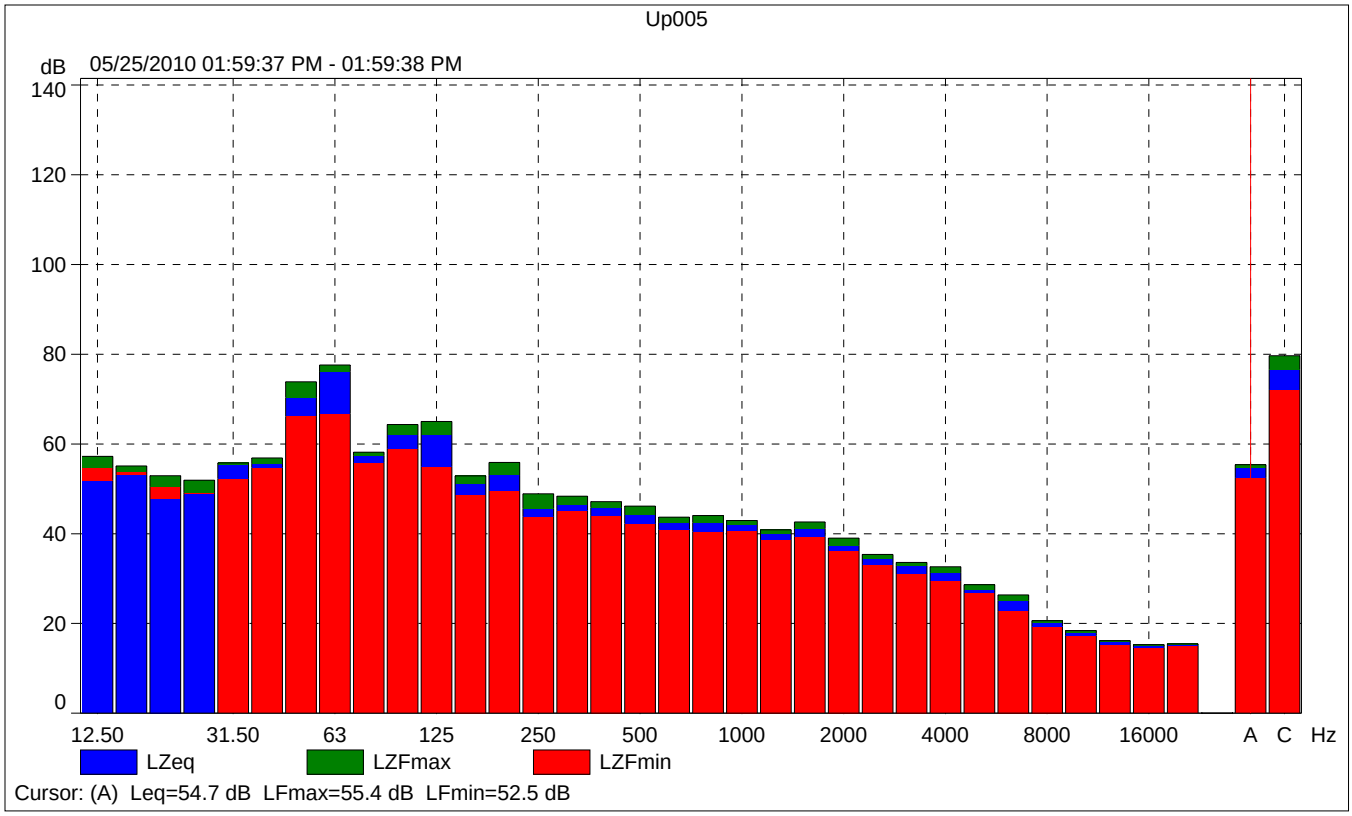

Up005
dB
05/25/2010 01:54:38 PM - 02:04:38 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=62.1 dB LFmax=81.4 dB LFmin=45.8 dB

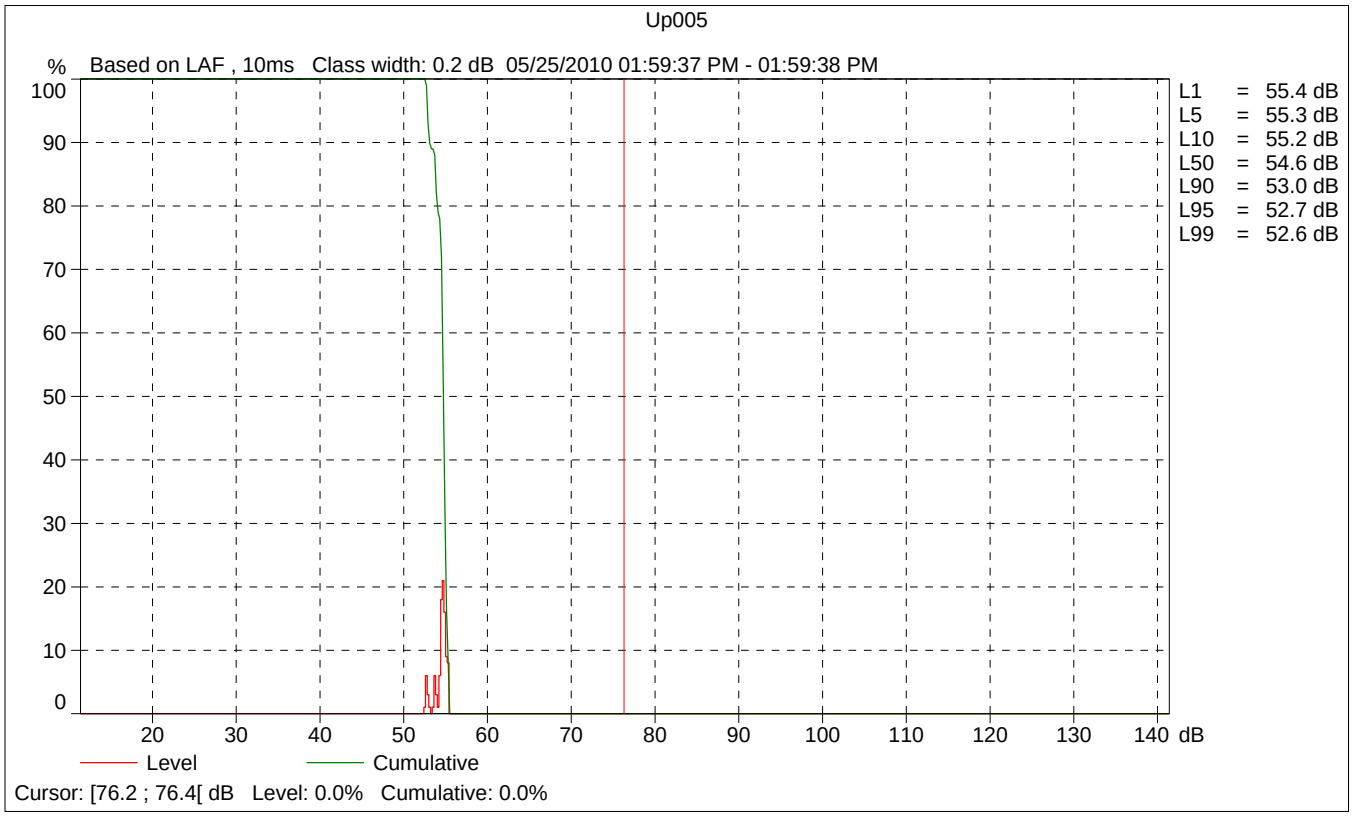

Up005
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:54:38 PM - 02:04:38 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 76.4 dB
L5 = 66.2 dB
L10 = 62.3 dB
L50 = 52.5 dB
L90 = 48.5 dB
L95 = 47.9 dB
L99 = 47.1 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 1.1%

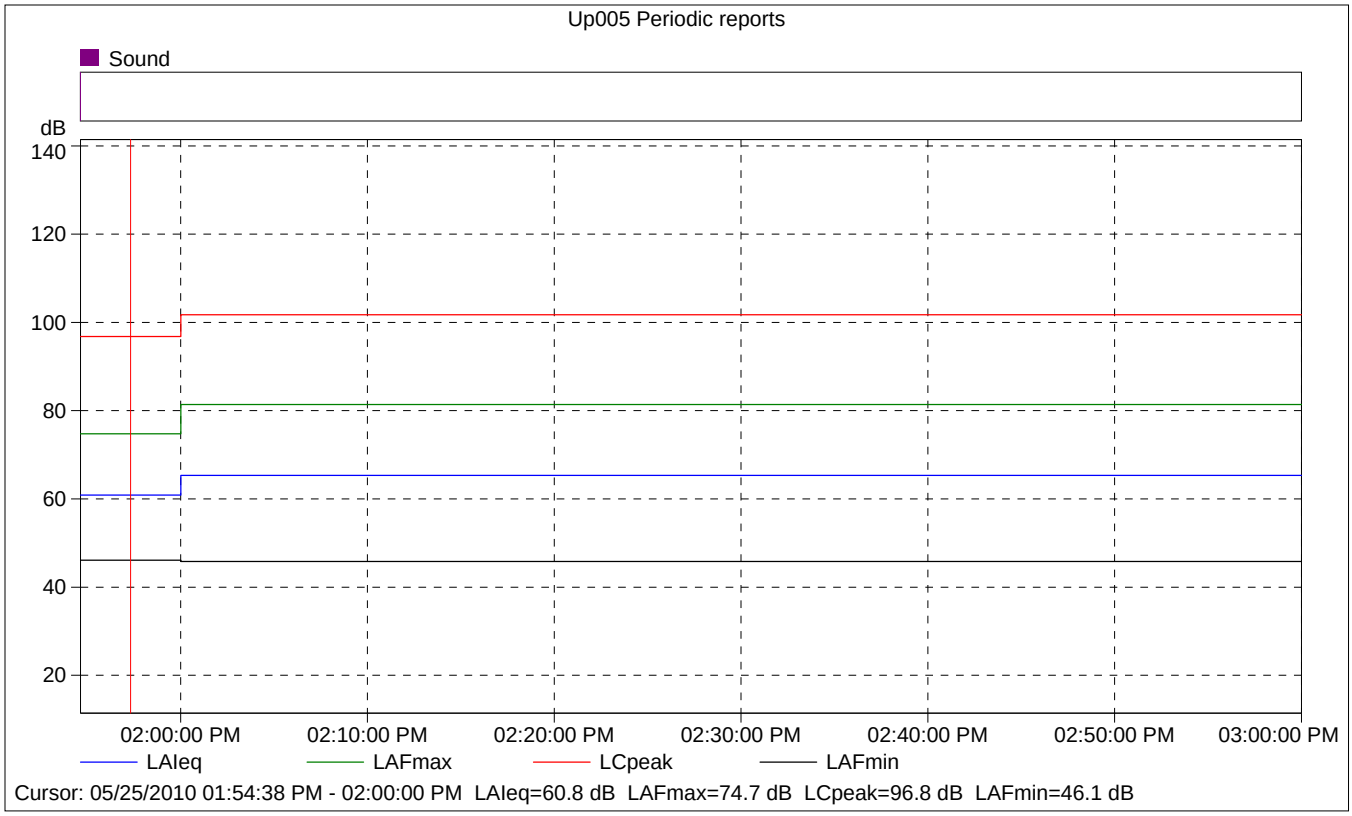


Up005

	Start time	Elapsed time	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			55.4	55.4	52.5
Time	01:59:37 PM	0:00:01			
Date	05/25/2010				

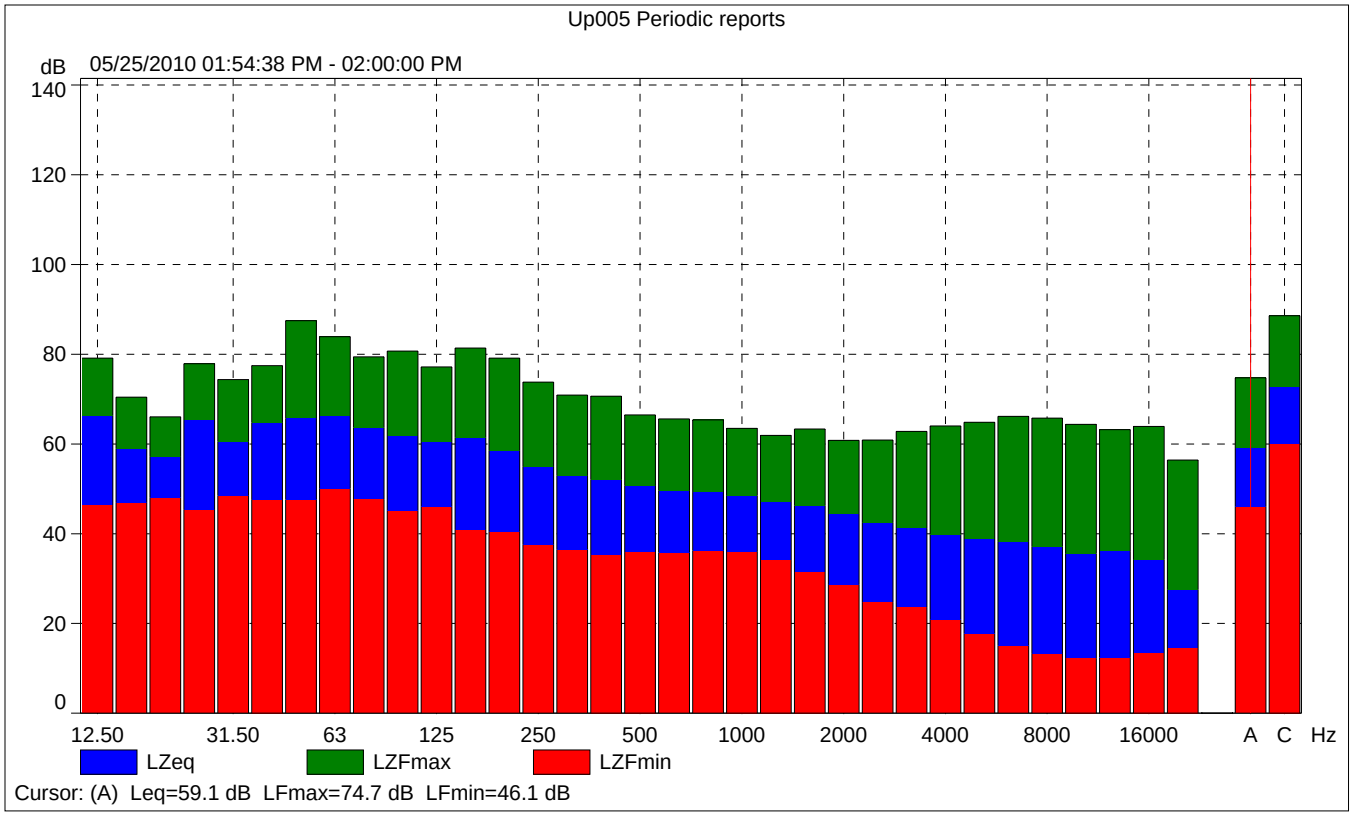

Up005
dB
05/25/2010 01:59:37 PM - 01:59:38 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=54.7 dB LFmax=55.4 dB LFmin=52.5 dB

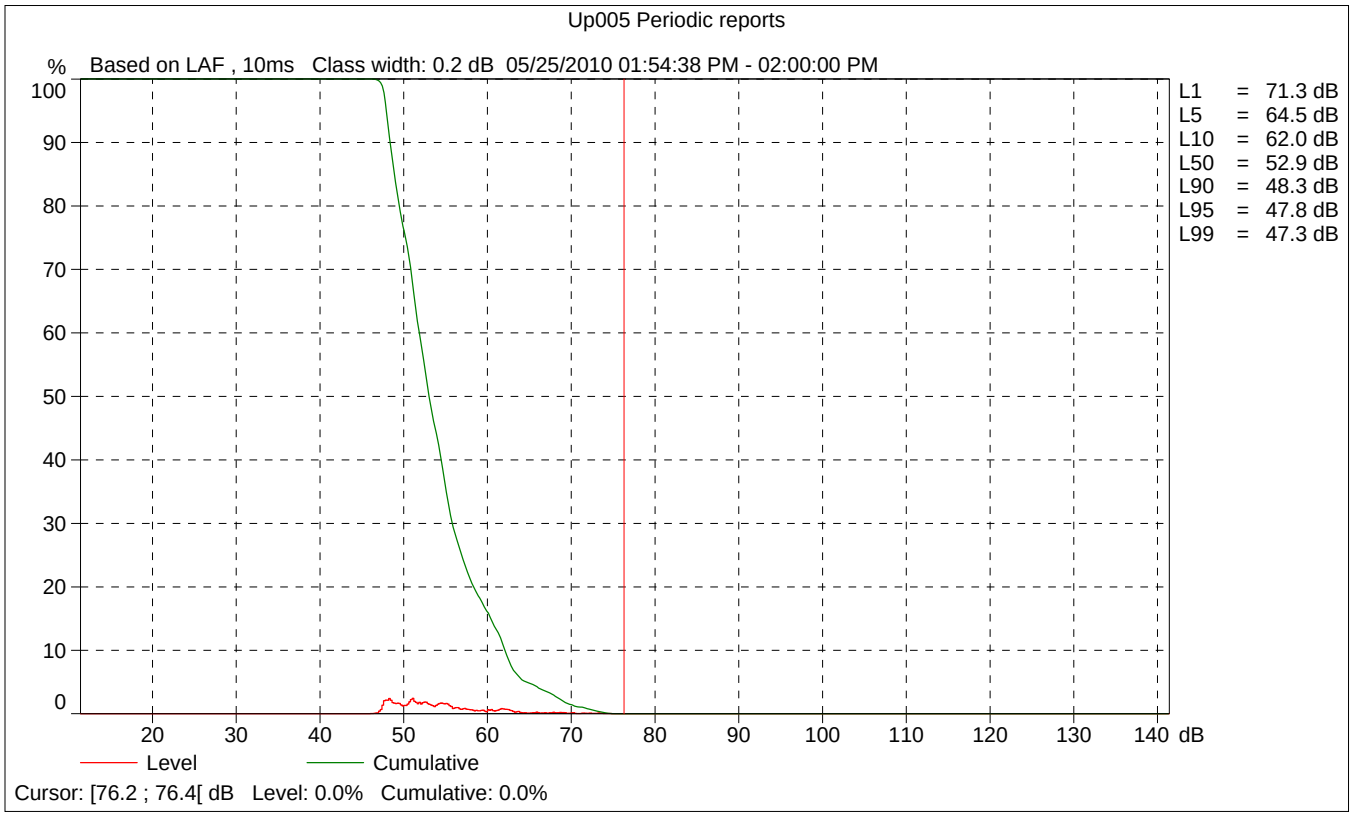

Up005
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:59:37 PM - 01:59:38 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 55.4 dB
L5 = 55.3 dB
L10 = 55.2 dB
L50 = 54.6 dB
L90 = 53.0 dB
L95 = 52.7 dB
L99 = 52.6 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%

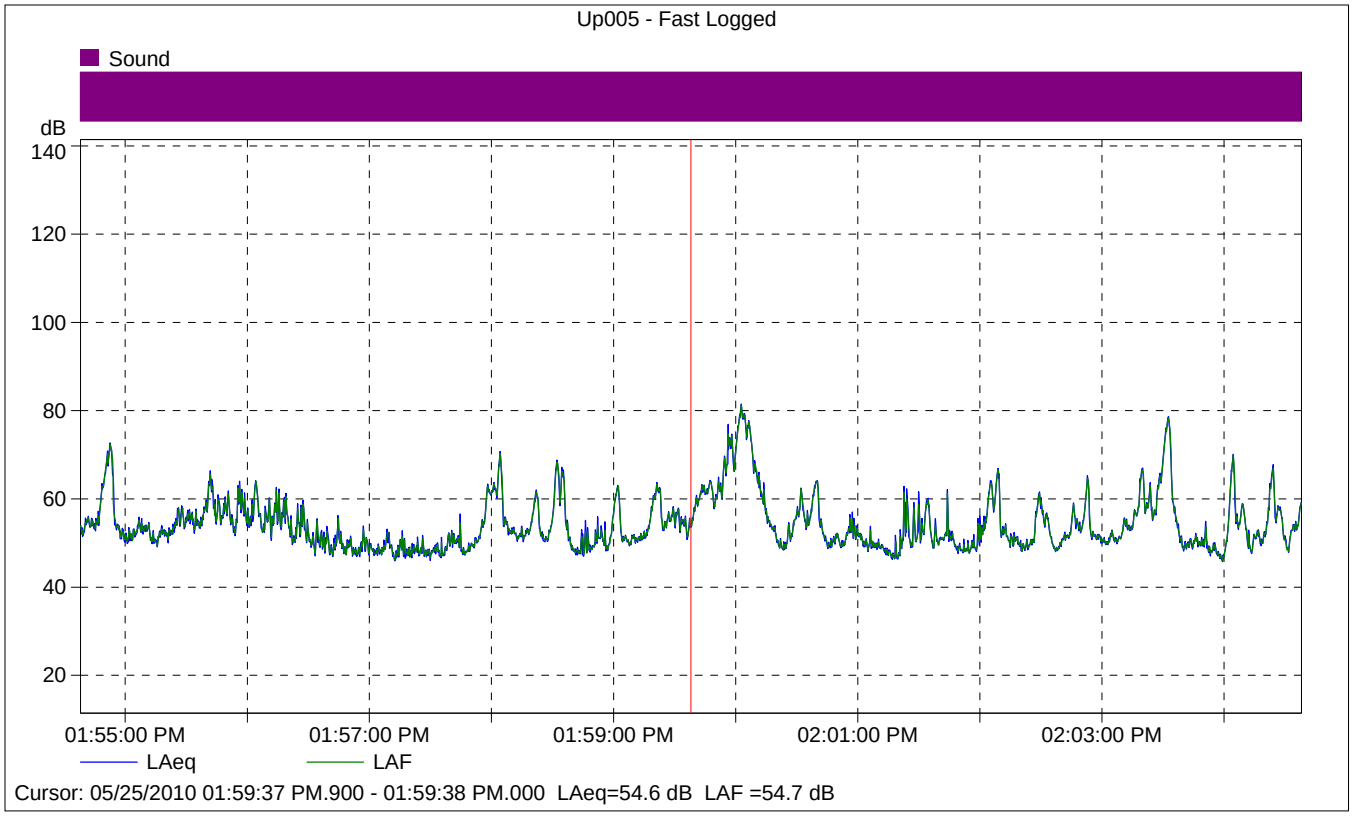


Up005 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	60.8	74.7	46.1
Time	01:54:38 PM	0:05:22				
Date	05/25/2010					


Up005 Periodic reports
dB
05/25/2010 01:54:38 PM - 02:00:00 PM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=59.1 dB LFmax=74.7 dB LFmin=46.1 dB


Up005 Periodic reports
%
Based on LAF , 10ms Class width: 0.2 dB 05/25/2010 01:54:38 PM - 02:00:00 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 71.3 dB
L5 = 64.5 dB
L10 = 62.0 dB
L50 = 52.9 dB
L90 = 48.3 dB
L95 = 47.8 dB
L99 = 47.3 dB
Level
Cumulative
Cursor: [76.2 ; 76.4[dB Level: 0.0% Cumulative: 0.0%



Up005 - Fast Logged

	Start time	Elapsed time	LAeq [dB]
Value			54.6
Time	01:59:37 PM.900	0:00:00.100	
Date	05/25/2010		

APPENDIX F
Infrastructure Analysis

WATER SUPPLY EVALUATION FOR THE DOWN TOWN SPECIFIC PLAN

An evaluation of the water infrastructure in the Down Town Specific Plan (DTSP) area was conducted to find deficiency locations, not only in the DTSP area but also in the vicinity. The attached maps, included as *Exhibit 1*, show the evaluation area. The evaluation was performed with the calibrated H2OMAP Water Model that contains all existing water lines and facilities in the City. A deficiency is defined as not meeting any criteria listed in the table below.

Criteria	Description	Requirement
(1)	Minimum Pressure on Avg Day Demand	50 psi
(2)	Minimum Pressure on Max Day Demand at Peak Hour Demand	40 psi
(3)	Fire Flow Residual Pressure during Max. Day Demand	20 psi

No deficiency was found for criteria (1) and (2). There are deficiencies for criterion (3). They are noted in *Table 1 and 2* and *Map 1 and 2 (Exhibit 1)*. To correct these identified fire flow deficiencies, corrective measures are recommended to achieve 20 psi pressure residual at all locations in the DTSP and its vicinity. The costs are also provided as estimates.

TABLE 1 - EXISTING FIRE FLOW DEFICIENCY LOCATION AND RECOMMENDED PROJECT

Deficiency Location	Recommendation			
	Proj. ID	Description	Length (ft)	Est. Cost (1)
Euclid Ave./F St.	**A-e**	Install 8-inch line connecting existing water lines on both sides of Euclid Ave.	150	$37,500
Euclid Ave./G St.	**B-e**	Upsize the existing 3-inch line to 6-inch.	1500	$375,000
NW Euclid Ave./Arrow Hwy (Palm Ave./Winn Dr.)		Proj. (B-e) eliminates the fire flow deficiency at this location.		
NW Campus Ave./8th St.	**C-e**	Install 8-inch line to eliminate the dead end.	500	$125,000
			Total =	**$537,500**

TABLE 2 - FUTURE (2030-35) FIRE FLOW DEFICIENCY LOCATION (2) AND RECOMMENDED PROJECT

Deficiency Location	Recommendation			
	Proj. ID	Description	Length (ft)	Cost
Euclid Ave./Euclid Pl.	**A-f**	Upsize 6-inch to 8-inch line.	150	$37,500
9th St., from Campus Ave. to 10th Ave.	**B-f**	Install new 14-inch line on 9th St. parallel to the existing 6-inch line, from Campus Ave. to 10th Ave.	1300	$325,000
9th St./9th Ave.	**C-f**	Connect the new 14-inch line with the existing 6-inch line, at 9th Ave.	60	$15,000
			Total =	**$377,500**

Note

1 Estimated (present) cost is based on $250/ft.
2 Future fire flow deficiency locations result from the DTSP development.
3 Estimated cost is present time based.

As part of the evaluation, the water supply for 2030-35 was also evaluated to determine if there will be sufficient supply to meet the DTSP water demand. The finding is demonstrated below and staff has determined that there will be sufficient supply for the future DTSP.

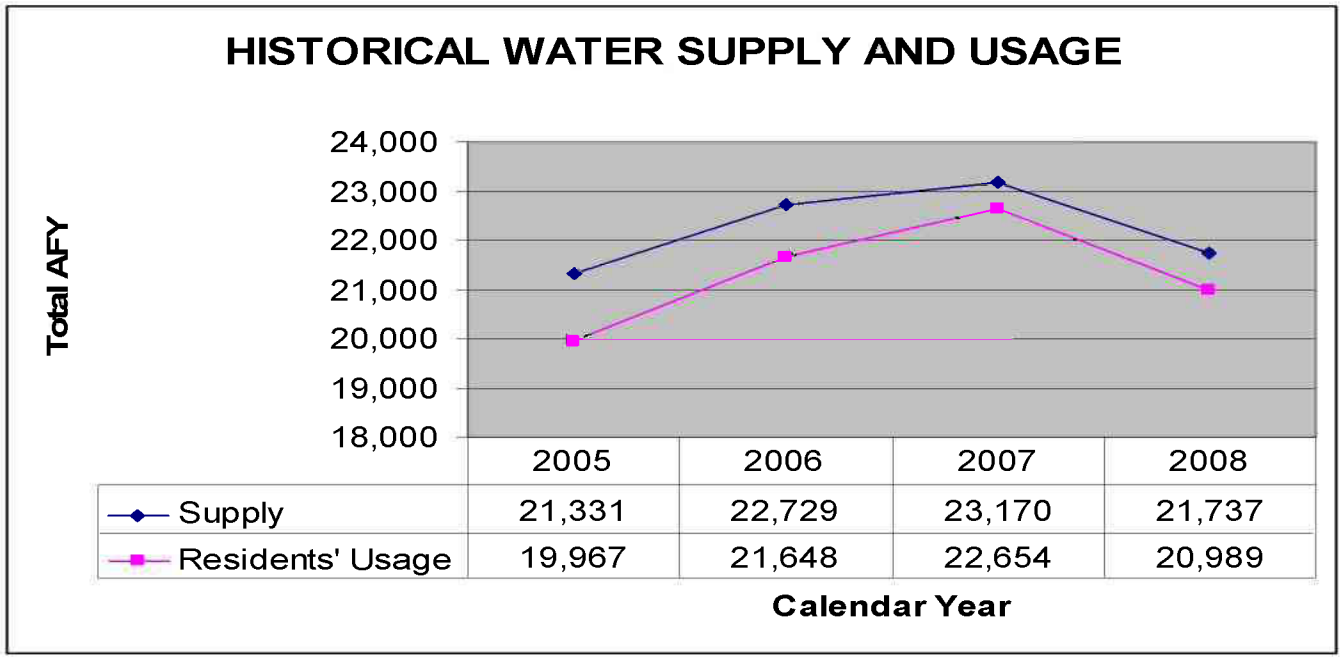
Table 3 lists the existing and projected future demand for the DTSP area. An increase of 465 AFY is projected for the DTSP development. During 2009, the City sold approximately 500 AFY to Monte Vista Waster District and the City of Chino. This surplus serves as an indication of the City's capacity in meeting the DTSP demand.

TABLE 3 – EXISTING AND FUTURE DEMANDS FOR DTSP AREA

DTSP Demand	Existing	Projected Future (2030-35) (*)
GPM	470	760
Increase/Difference		**290 (GPM) / 465 (AFY)**

(*) Projected demand is based on the DTSP land use and anticipated future demands based on existing usages and population growth projection, taking into account the projected future recycled water use in DTSP and nearby locations (100 AFY).

The graph below demonstrates the historical supply and usage demand, and the flexibility to accommodate new development.



In addition, a review of the storage capacity was conducted to determine if it provides 130% of maximum day demand (for both operational and emergency storage) while having additional storage for fire flow requirement. The DTSP is situated in the City's (hydraulic) Zone 1, which can be fed or supplied from Zone 2.

Table 4 below shows the existing available storage and surplus or shortage, for each zone or as a combination of both, to meet the optimum storage requirement. As showed, an additional storage of 1.6 MG will be needed for both zones in the future for the DTSP development.

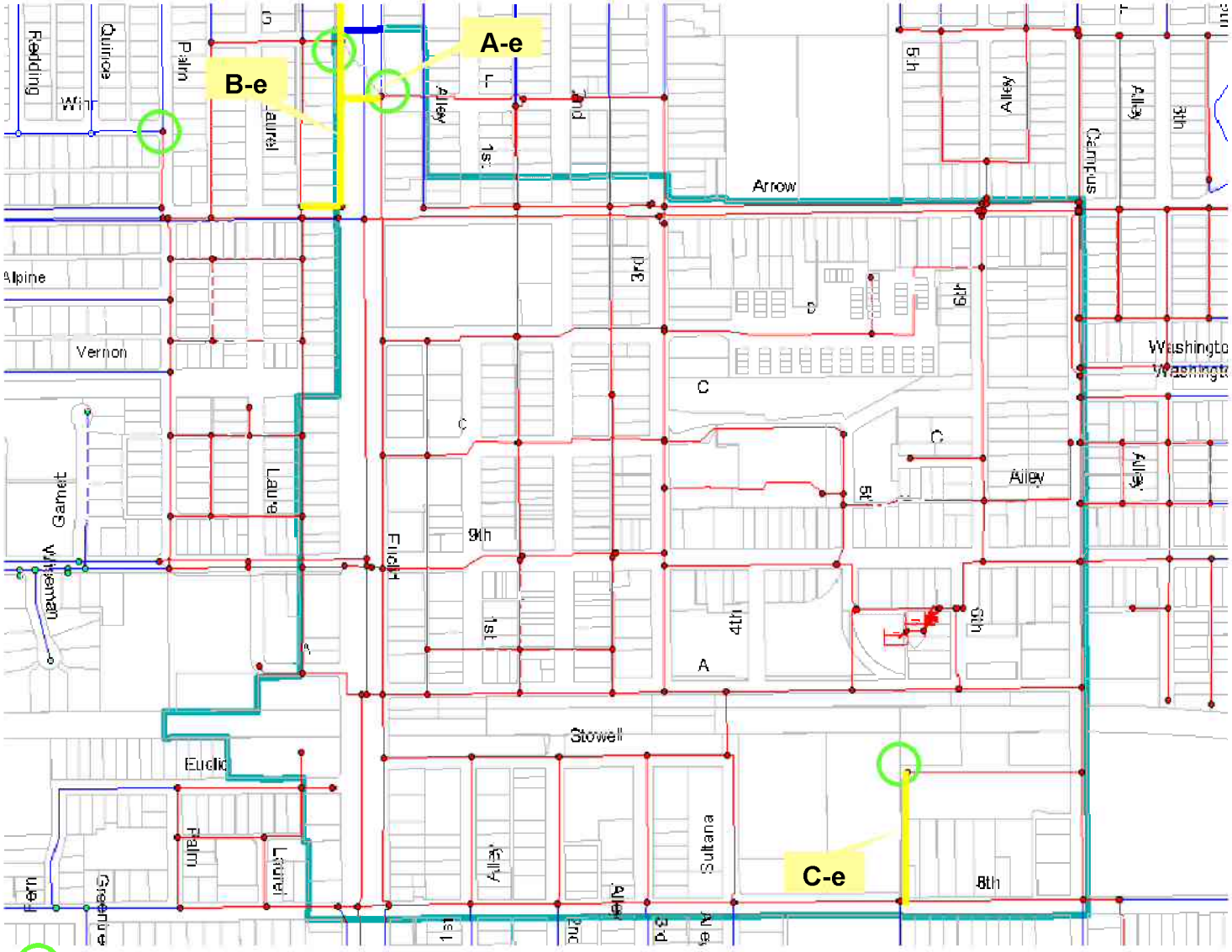
TABLE 4 – EXISTING STORAGE AND STORAGE SURPLUS/SHORTAGE (MG)

Zone	Existing Storage	Existing Surplus(+) / Shortage (-)	Projected Future (2030-35) Surplus(+) / Shortage (-)
Zone 1	10.5	- 6.5	- 7.7
Zone 2	18.4	+ 7.0	+ 6.1
Combined Surplus / Shortage		**+ 0.5**	**- 1.6**

EXHIBIT 1

MAPS SHOWING LOCATIONS OF FIRE FLOW DEFICIENCIES AND RECOMMENDED PROJECTS

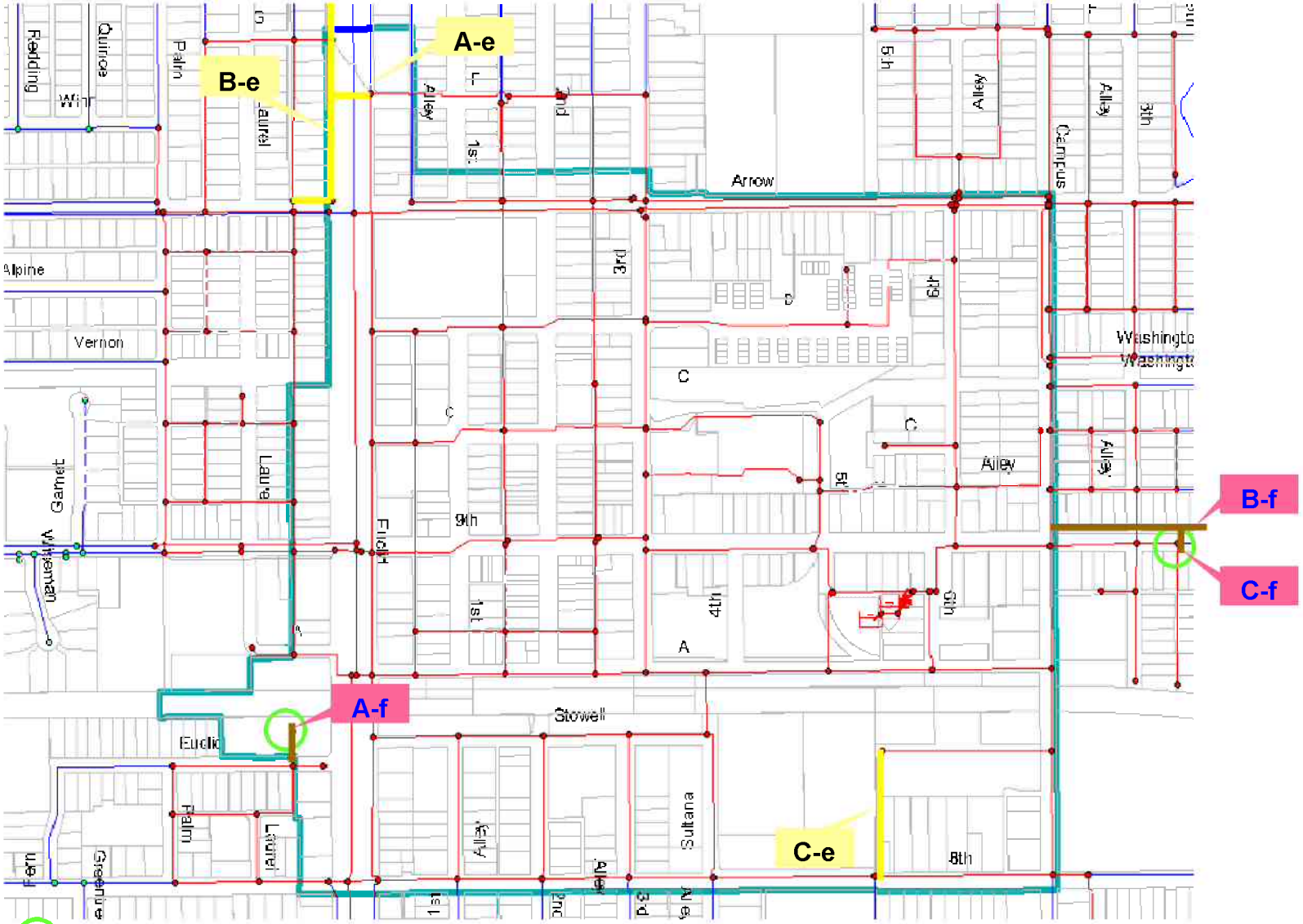
MAP 1 - Evaluation of Existing Fire Flow Deficiency Location for the Down Town Development Project (DTSP)



Locations of existing deficiency due to not meeting the fire flow residual requirement of 20 psi.

Existing corrective actions: A-e – Install 8-inch line (150 ft) connecting water lines both side of Euclid Ave.;
B-e – Upsize 3-inch line to 6-inch line (1450 ft total, from 11th St. to Arrow Hwy); and
C-e – Install 8-inch line (500 ft) to eliminate dead end as showed.

MAP 2 - Evaluation of Future (2030-35) Fire Flow Deficiency Location for Down Town Development Project (DTSP)



Locations of additional future deficiencies due to not meeting the fire flow residual requirement of 20 psi.

Future corrective actions: A-f – Upsize 6-inch to 8-inch line (130 ft);
B-f – Install a 14-inch parallel line (1290 ft) on 9th St. (from Campus Ave. to 10th Ave.); and
C-f – Connect the exiting water line with the new 14-inch (60 ft).

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN
SEWER UTILITY INFRASTRUCTURE ANALYSIS

1. SCOPE

Conducted a quantitative sewer analysis for the Historic Downtown Specific Plan area, in which the analysis evaluated system capacity and identified capacity deficiencies of the system under existing and a "preferred alternative" scenario using present-day zoning and land-uses within the Historic Downtown Specific Plan area. The analysis was completed using Bentley SewerCAD V8i software.

The Historic Downtown Sewer Analysis was based on the following design criteria –

Pipe Diameter	Depth of flow/Pipe Diameter (D/d – ratio)	Design Velocity
8-inches diameter and less	0.50	2 fps min., 15 fps max.
Greater than 8-inch in diameter	0.75	2 fps min., 15 fps max.

The Sewer Model indicated several sewer mains within the existing condition scenario that exceed the design criteria (see attached Table 1) and should be considered for future upgrades before additional development takes place within the Historic Downtown Specific Plan Area.

The estimated increase in wastewater generation for the "preferred alternative" scenario, range from 357,000 to 392,500 gallons per day and the higher of the two flows was used to model the "preferred alternative" scenario and generate flow calculations.

Based on the "preferred alternative" output files it appears that several additional sewer line segments exceed the design criteria (see attached Table 2) and will require mitigation prior to development.

A table has been prepared that lists the required mitigation measures per line segment and can be found on Table 3, which gives the location of the sewer line segments, diameter of the line and required mitigation.

In addition Table 4 has been attached and provides a cost breakdown for each individual sewer line segment that will require mitigation; please refer to the attached map labeled "Historic Downtown Upland Sewer Segment Map" for the sewer line segments located within and tributary to the downtown area.

Table 1 (Existing Condition):

Sewer Pipe Label	Label	Location of Sewer Line:	Dia. Of Line Segment	Flow (Maximum) (mgd)	Velocity (Maximum Calculated) (ft/s)	Depth (Average End) / Rise (Maximum) (%)	Capacity Deficient (Y or N)
A	06C010E	Richland, Sultana east	21 inch	3.4503	2.86	65.6	N
B	06C020E	Esmt, Richland to Campus	18 inch	3.4503	4.09	70.5	N
C	06C040S	Campus at Richland	18 inch	3.4937	4.01	72.2	N
D	06C050S	Campus, Sycamore to Richland	18 inch	1.921	4.26	58.2	N
E	06C060E	Richland, Campus east	18 inch	5.1293	8.06	63.6	N
F	06G020E	Richland e/o Campus	18 inch	5.1293	6.6	68.6	N
G	06G025E	Richland e/o Campus	27 inch	5.1293	5.61	43.2	N
H	06G045E	IEUA Trunk	27 inch	5.2453	7.04	38.3	N
I	06G055S	IEUA Trunk	27 inch	5.2453	7.35	37.8	N
J	07C010E	7th St, 1st Av to 3rd Av	10 inch	0.4636	2.47	52	N
K	07C025S	7th st-Sultana	21 inch	3.4167	3.1	69.5	N
L	07C040S	Alley w/o of Campus between Highland and Seventh	8 inch	0.1598	2.29	61.7	Y
M	07C050E	7th St. between alley w/o Campus and Campus	10 inch	0.3487	1.55	76.6	Y
N	07C060S	Campus, 7th to Sycamore	15 inch	1.8849	7.18	45.7	N
O	07E020S	Seventh between alley west of Sultana and Sultana	8 inch	0.5273	5.14	57.1	Y
P	07E070E	7th St, Euclid to 1st Av	10 inch	0.3572	2.38	48.4	N
Q	08C010S		10 inch	0.8013	3.25	71.9	N
R	08C020E		12 inch	0.6774	3.5	55.6	N
S	08C030E		12 inch	0.732	1.99	66.5	N
T	08C040S	Campus, A St to 7th St	12 inch	1.4865	7.02	66.8	N
U	08E010E	A St, Euclid to Campus	12 inch	0.5556	3.23	40.9	N
V	09C010E	Ninth between Sixth and Campus	8 inch	0.538	2.77	72.5	Y
W	09C020S	Campus between Ninth to first manhole south of Ninth	8 inch	0.5752	5.44	64.6	Y
X	09E010S	Alley west of Euclid between Arrow highway and Ninth	8 inch	0.3196	3.28	38.8	N
Y	09E020S	Alley west of Euclid from manhole north of Ninth to A st.	8 inch	0.4952	3.99	50.7	Y
z	AHC090E	Arrow Hwy between fifth and Sixth	8 inch	0.3212	3.36	50.5	Y
AA	AHC100S	Sixth Ave. between Arrow Hwy and Ninth St.	8 inch	0.346	4.79	56.8	Y

Table 2 (Preferred Alternative):

Sewer Pipe Label	Label	Location of Sewer Line:	Dia. Of Line Segment	Flow (Maximum) (mgd)	Velocity (Maximum Calculated) (ft/s)	Depth (Average End) / Rise (Maximum) (%)	Capacity Deficient (Y or N)
A	06C010E	Richland, Sultana east	21 inch	3.5276	2.87	66.7	N
B	06C020E	Esmt, Richland to Campus	18 inch	3.5276	4.1	71.8	N
C	06C040S	Campus at Richland	18 inch	3.571	4.02	73.9	N
D	06C050S	Campus, Sycamore to Richland	18 inch	2.1164	4.37	60.3	N
E	06C060E	Richland, Campus east	18 inch	5.4055	8.15	65.5	N
F	06G020E	Richland e/o Campus	18 inch	5.4055	6.67	70.7	N
G	06G025E	Richland e/o Campus	27 inch	5.4055	5.69	44.4	N
H	06G045E	IEUA Trunk	27 inch	5.5215	7.14	39.4	N
I	06G055S	IEUA Trunk	27 inch	5.5215	7.46	38.8	N
J	07C010E	7th St, 1st Av to 3rd Av	10 inch	0.5027	2.51	55.1	N
K	07C025S	7th st-Sultana	21 inch	3.494	3.11	70.7	N
L	07C040S	Alley w/o of Campus between Highland and Seventh	8 inch	0.2182	2.49	69	Y
M	07C050E	7th St. between alley w/o Campus and Campus	10 inch	0.4044	1.6	82.1	Y
N	07C060S	Campus, 7th to Sycamore	15 inch	2.0804	7.38	48.2	N
O	07E020S	Seventh between alley west of Sultana and Sultana	8 inch	0.6041	5.32	61.5	Y
P	07E070E	7th St, Euclid to 1st Av	10 inch	0.3616	2.39	49.8	N
Q	08C010S		10 inch	0.8013	3.25	73.4	N
R	08C020E		12 inch	0.6946	3.52	56.8	N
S	08C030E		12 inch	0.7596	2	68.6	N
T	08C040S	Campus, A St to 7th St	12 inch	1.5923	7.15	69.8	N
U	08E010E	A St, Euclid to Campus	12 inch	0.5556	3.23	41.2	N
V	09C010E	Ninth between Sixth and Campus	8 inch	0.538	2.77	73.6	Y
W	09C020S	Campus between Ninth to first manhole south of Ninth	8 inch	0.5752	6.18	74.8	Y
X	09E010S	Alley west of Euclid between Arrow highway and Ninth	8 inch	0.3196	3.98	55.7	Y
Y	09E020S	Alley west of Euclid from manhole north of Ninth to A st.	8 inch	0.4952	4.82	54.3	Y
z	AHC090E	Arrow Hwy between fifth and Sixth	8 inch	0.3212	3.58	51.7	Y
AA	AHC100S	Sixth Ave. between Arrow Hwy and Ninth St.	8 inch	0.346	5.1	57.9	Y

09G010E		8 inch	0.2774	2.86	48.1	
09G020S		8 inch	0.3327	3.47	47.3	
09G024S		8 inch	0	0	0	
09G024W		8 inch	0.1841	3.08	40	
09G026S		8 inch	0.2444	3.41	68.4	
09M010S		8 inch	0.1866	3.67	41.6	
09M020S		8 inch	0.278	4.91	50	
09S010S		8 inch	0.5421	3.7	63.4	
11G010S		8 inch	0.0902	3.5	35.7	
AHC080S		8 inch	0.2512	4.96	46.5	
AHC090E		8 inch	0.3212	3.36	50.5	
AHC100S		8 inch	0.346	4.79	65.8	
AHM060E		8 inch	0.1146	1.94	44.5	
AHM070S		8 inch	0.2332	4.72	50.1	
AHM080E		8 inch	0.3408	2.5	59.4	
AHM090S		8 inch	0.0947	3.63	28	
AHM100W		8 inch	0.1206	2.19	45.2	
AHM110S		8 inch	0.4739	5.69	66.8	
AHM120S		8 inch	0	0	18.6	
AHS010S		8 inch	0.4346	5.11	49.1	
AHS020E		10 inch	0.5068	2.14	67.4	
AHS030E		10 inch	0.5881	2.19	71.3	
AHS040E		10 inch	0.6032	2.24	80.2	
AHS055E		10 inch	0.3016	2.41	37.2	
AHS055S		8 inch	0.3167	5.2	57.1	

Sewer Lines within the Historic Downtown Specific Area

Sewer Lines out-side of the Historic Downtown Specific Area

Table 3 (Sewer System Performance w/Mitigated Measures):

Sewer Pipe Label	Label	Location of Sewer Line:	Dia. Of Line Segment	Delta Difference (%)	Mitigation Required:
A	06C010E	Richland, Sultana east	21 inch	1.1	None
B	06C020E	Esmt, Richland to Campus	18 inch	1.3	None
C	06C040S	Campus at Richland	18 inch	1.7	None
D	06C050S	Campus, Sycamore to Richland	18 inch	2.1	None
E	06C060E	Richland, Campus east	18 inch	1.9	None
F	06G020E	Richland e/o Campus	18 inch	2.1	None
G	06G025E	Richland e/o Campus	27 inch	1.2	None
H	06G045E	IEUA Trunk	27 inch	1.1	None
I	06G055S	IEUA Trunk	27 inch	1	None
J	07C010E	7th St, 1st Av to 3rd Av	10 inch	3.1	None
K	07C025S	7th st-Sultana	21 inch	1.2	None
L	07C040S	Alley w/o of Campus between Highland and Seventh	8 inch	7.3	Construct 12" parallel line
M	07C050E	7th St. between alley w/o Campus and Campus	10 inch	5.5	Construct 12" parallel line
N	07C060S	Campus, 7th to Sycamore	15 inch	2.5	None
O	07E020S	Seventh between alley west of Sultana and Sultana	8 inch	4.4	Construct 10" parallel line
P	07E070E	7th St, Euclid to 1st Av	10 inch	1.4	None
Q	08C010S		10 inch	1.5	None
R	08C020E		12 inch	1.2	None
S	08C030E		12 inch	2.1	None
T	08C040S	Campus, A St to 7th St	12 inch	3	None
U	08E010E	A St, Euclid to Campus	12 inch	0.3	None
V	09C010E	Ninth between Sixth and Campus	8 inch	1.1	Construct 10" parallel line
W	09C020S	Campus between Ninth to first manhole south of Ninth	8 inch	10.2	Construct 10" parallel line
X	09E010S	Alley west of Euclid between Arrow highway and Ninth	8 inch	16.9	Construct 10" parallel line
Y	09E020S	Alley west of Euclid from manhole north of Ninth to A st.	8 inch	3.6	Construct 10" parallel line
z	AHC090E	Arrow Hwy between fifth and Sixth	8 inch	1.2	Construct 10" parallel line
AA	AHC100S	Sixth Ave. between Arrow Hwy and Ninth St.	8 inch	1.1	Construct 10" parallel line

Table 4 (Mitigated Measure Cost):

Sewer Pipe Label	Label	Location of Sewer Line:	Dia. Of Line Segment	Segment Length (ft.)	Mitigation Required:	Cost $ (10" VCP @ $140/LF, 12" VCP @ $150/LF)
A	06C010E	Richland, Sultana east	21 inch	608	None	
B	06C020E	Esmt, Richland to Campus	18 inch	963	None	
C	06C040S	Campus at Richland	18 inch	195	None	
D	06C050S	Campus, Sycamore to Richland	18 inch	387	None	
E	06C060E	Richland, Campus east	18 inch	896	None	
F	06G020E	Richland e/o Campus	18 inch	390	None	
G	06G025E	Richland e/o Campus	27 inch	1892	None	
H	06G045E	IEUA Trunk	27 inch	289	None	
I	06G055S	IEUA Trunk	27 inch	2160	None	
J	07C010E	7th St, 1st Av to 3rd Av	10 inch	866	None	
K	07C025S	7th st-Sultana	21 inch	8	None	
L	07C040S	Alley w/o of Campus between Highland and Seventh	8 inch	334	Construct 12" parallel line	$50,100.00
M	07C050E	7th St. between alley w/o Campus and Campus	10 inch	183	Construct 12" parallel line	$27,450.00
N	07C060S	Campus, 7th to Sycamore	15 inch	323	None	
O	07E020S	Seventh between alley west of Sultana and Sultana	8 inch	50	Construct 10" parallel line	$7,000.00
P	07E070E	7th St, Euclid to 1st Av	10 inch	506	None	
Q	08C010S		10 inch	190	None	
R	08C020E		12 inch	697	None	
S	08C030E		12 inch	676	None	
T	08C040S	Campus, A St to 7th St	12 inch	101	None	
U	08E010E	A St, Euclid to Campus	12 inch	334	None	
V	09C010E	Ninth between Sixth and Campus	8 inch	242	Construct 10" parallel line	$33,880.00
W	09C020S	Campus between Ninth to first manhole south of Ninth	8 inch	585	Construct 10" parallel line	$81,900.00
X	09E010S	Alley west of Euclid between Arrow highway and Ninth	8 inch	293	Construct 10" parallel line	$41,020.00
Y	09E020S	Alley west of Euclid from manhole north of Ninth to A st.	8 inch	276	Construct 10" parallel line	$38,640.00
z	09E010S	Arrow Hwy between fifth and Sixth	8 inch	330	Construct 10" parallel line	$46,200.00
AA	09E020S	Sixth Ave. between Arrow Hwy and Ninth St.	8 inch	1346	Construct 10" parallel line	$188,440.00
					Total Cost	**$514,630.00**

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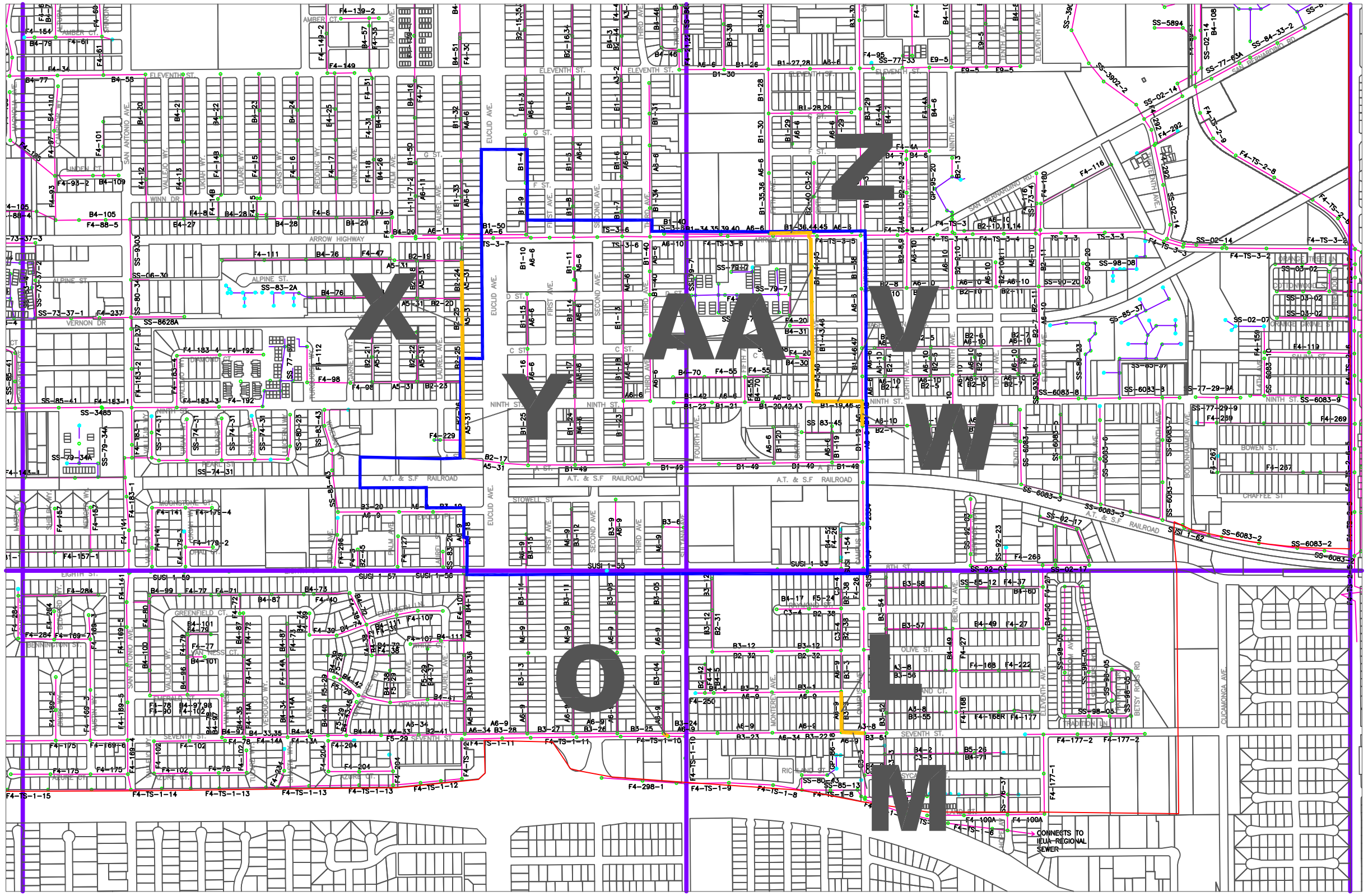

HISTORIC DOWNTOWN UPLAND SEWER SEGMENT MAP

LEGEND

HISTORIC DOWNTOWN UPLAND BOUNDARY

SEWER SEGMENTS THAT REQUIRE MITIGATION

SCALE: 1"=400'

1. DOWNTOWN UPLAND – EXISTING DRAINAGE SYSTEMS

The two major storm drain interceptors affording flooding protection to the Downtown area are –

- South Upland Storm Interceptor (SUSI), Segment 1
- South Upland Storm Interceptor (SUSI), Segment 2

Note: refer to the "Historic Downtown upland Storm Drain Segment Map" for location.

SUSI 1 is a regional drain, starting at the 8th St. Flood Control Basin at 8th St. east of 11th Ave., runs westerly along 8th St., to San Antonio Ave. where it turns north along San Antonio Ave. to Vernon Dr. (Southern Pacific Rail Road tracks). The drainage conveyance structures range from 12' x 12' reinforced concrete box culverts (RCBC) to 90-inch diameter reinforced concrete pipes (RCP).

SUSI 2 is also a regional drain, beginning with the segment of the West Cucamonga Channel at the 8th St. Basin northerly to 9th St., then runs westerly along 9th St. to 11th Ave. where it turns north along 11th Ave. to Washington Bl. and then west along the SPRR tracks to Euclid Avenue. The drainage conveyance structures range from 14' x 16' RCBC to 90-inch diameter RCP.

There is a major local drain along "A" St. from 3rd Ave. easterly to Campus Ave., then southerly along Campus Ave. to 8th St. where it connects to SUSI 1. The drainage conveyance structures range from 48-inch RCP to 60-inch diameter RCP.

There are several minor local drains within the vicinity of the downtown development as follows ;

- 6th Ave. Drain – a 15-inch diameter RCP from 9th St. south to "A" St.
- 2nd Ave. Drain – a 18" x 22" Corrugated metal Pipe arch (CMPA) from "A" St. south to Stowell Ave.

2. DOWNTOWN UPLAND – MASTER PLANNED DRAINAGE SYSTEMS

The Williamson & Schmid Report include the following masterplanned drainage facilities in the vicinity of the Downtown development area-

2.1 Major Local Drains

- Facility ID A-03, generally along Euclid Ave., from the SPRR-Bike Trail, north to Foothill Blvd. This connects to the western upstream terminus of the SUSI, Segment 2 regional drain. The drainage conveyance structures range from 78-inch RCP to 96-inch diameter RCP.
- Facility ID A-02, generally along Campus Ave., from Arrow Hwy, north to Foothill Blvd. This connects to the northern upstream terminus of SUSI Segment 2 regional drain. The drainage conveyance structures range from 42-inch RCP to 66-inch diameter RCP.

2.2 Minor Local Drains

- Facility ID A-02-01, generally along Campus Ave. from "A" St. north to 9th St., thence west along 9th St. to 5th Ave. This connects to the existing Campus Ave.

drain at "A" St., which drains to SUSI 1. The drainage conveyance structures range from 24-inch RCP to 42-inch diameter RCP.

- Facility ID A-02-02, generally along Arrow Hwy. from Campus Ave. west to 1st Ave. This connects to the existing Campus Ave. lateral to SUSI 2. The drainage conveyance structures range from 30-inch RCP to 60-inch diameter RCP.
- Facility ID A-01-04, generally along 2nd Ave. at 8th St. where it connects to SUSI 1, northerly to "A" St., where it turns west along "A" St. to 1st Ave. where it turns north along 1st Ave. to 9th St. The drainage conveyance structures range from 24-inch RCP to 30-inch diameter RCP.

Additionally, CivilStorm Software by Bentley V8i was utilized to model all existing and proposed Storm Drain Systems in order to verify the 1994 Williamson & Schmid Master Drainage Report based on current drainage practices and conditions. The Hydrology exercise validated flows from the Williamson & Schmid Master Drainage Report.

The estimated cost for the above listed drainage improvements is tabulated below:

No.	Segment	Size & Lgth. (in. & L.F.)		Estimated Cost Current Yr 2010 $
	Major Local Drains	FACILITY ID A-03		
1	Euclid Ave. (from Vernon Dr. to Foothill Blvd.)	78 - 96	1,997	$1,218,170.00
	Major Local Drains	FACILITY ID A-02		
2	Campus Ave (from Arrow to Foothill)	42 - 66	3,650	$1,556,214.00
	Minor Local Drains	FACILITY ID A-02-01		
3.1	Campus Ave (from "A" St. to 9th St.)	36 - 42	400	$126,000.00
3.2	9th St. (Campus to 5th Av)	24 - 30	950	$218,500.00
	Minor Local Drains	FACILITY ID A-02-02		
4.1	Arrow Highway (Sta. 0+00 to 7+25)	60	725	$300,150.00
4.2	Arrow Highway (Sta. 7+25 to 17+25)	48	1,000	$331,000.00
4.3	Arrow Highway (from Sta. 17+25 to 21+25)	42	400	$126,000.00
4.4	Arrow Highway (from Sta. 21+25 to 24+75)	30	350	$80,500.00
	Minor Local Drains	FACILITY ID A-01-04		
5	1st Av-"A" St-2nd Av	24	1,600	$318,336.00

Sub-total	$4,274,870.00
Contingency, 30%	$1,282,461.00
Total	**$5,557,331.00**

3. PROJECT IMPACTS

3.1 Storm Water Runoff Quantity –Impacts related the drainage system is considered significant if the anticipated run-off generation causes a measurable increase in runoff flows as to result in flooding.

The proposed development occurs mostly in existing impervious areas (parking lots), there should be no appreciable change in runoff generation or volume of storm water runoff, which does not alter the Williamson & Schmid Master Drainage Report.

3.2 Storm Water Quality – As indicated above, the project area is mostly developed and occurs in areas with limited opportunities for the implementation of low impact development (LID) principles. However, there are several best management practices (BMP's) that could be considered.

Compliance with an approved Water Quality Management Plan or current analysis/reporting requirements shall be a condition of any required planning approval and all additional required items as indicated by the Department of Public Works at the time of submittal.

Where feasible the following should be implemented with new developments, these are:

- Combination of structural and non-structural Best Management Practices (BMPs) (e.g., bioswales, storm drain filters, permeable pavement, etc,) shall be installed to effectively prevent the entry of pollutants from the project site into the storm drain system during and after development.
- *For parking areas with 5 or more spaces.* The parking area and associated driveways shall be designed to minimize degradation of storm water quality. Best Management Practices (BMPs) such as oil/water separators, sand filters, landscaped areas for infiltration, basins or equivalent BMPs shall be installed to intercept and effectively prohibit pollutants from discharging to the storm drain system. The BMPs selected shall be maintained in working order. The landowner is responsible for the maintenance and operation of all improvements.
- A parking lot cleaning program shall be developed and implemented. The program shall include the following elements: removal of litter; spot cleaning of oil, fuel, and other automotive leaks; vacuum sweeping on a *regular* basis; inspection and cleaning of storm drain inlets and catch basins before November 1 and in January of each year; and posting of signs prohibiting littering, oil changing, and other automotive repairs. Debris removed from the catch basins shall be disposed of accordingly.

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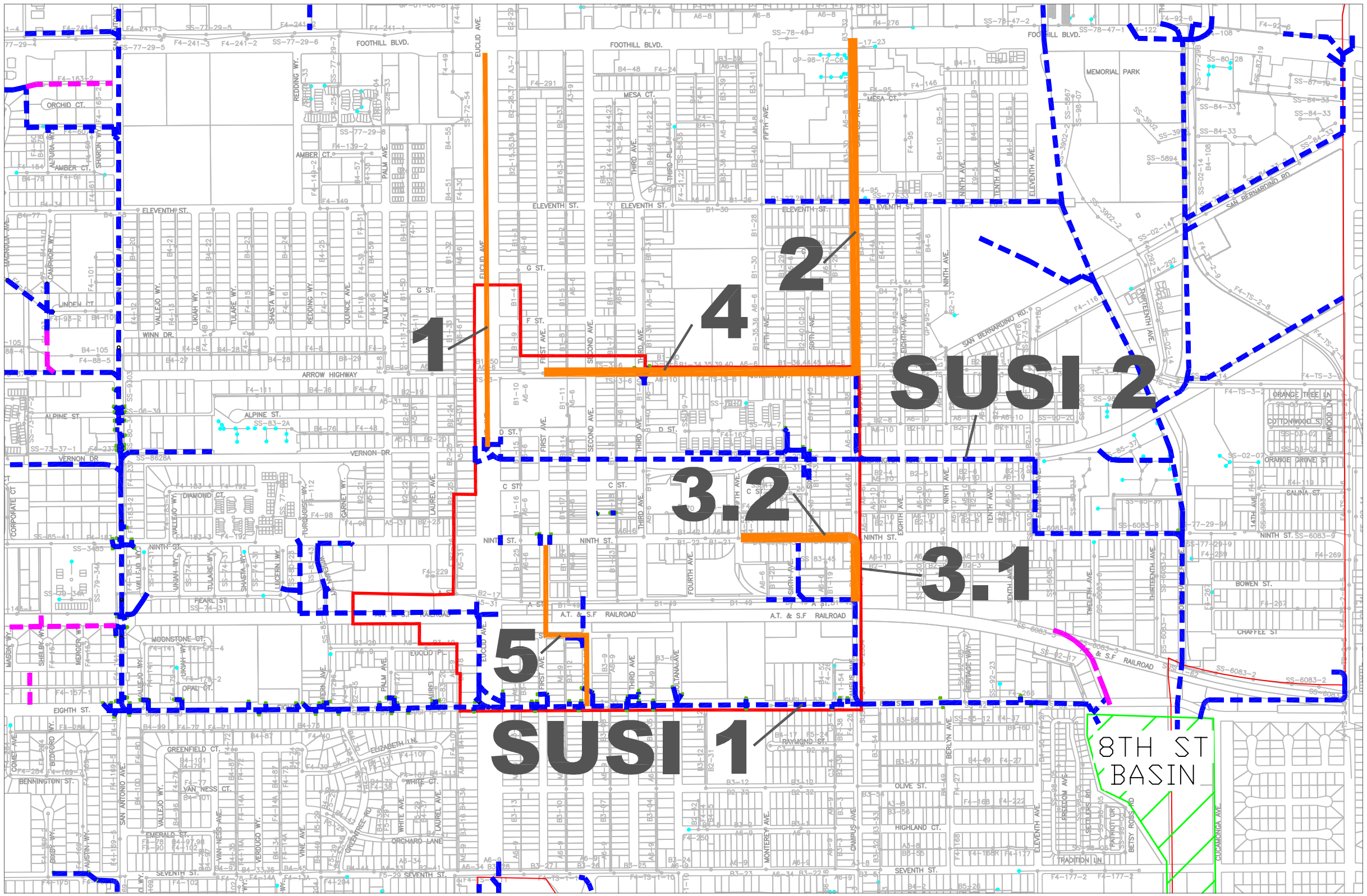
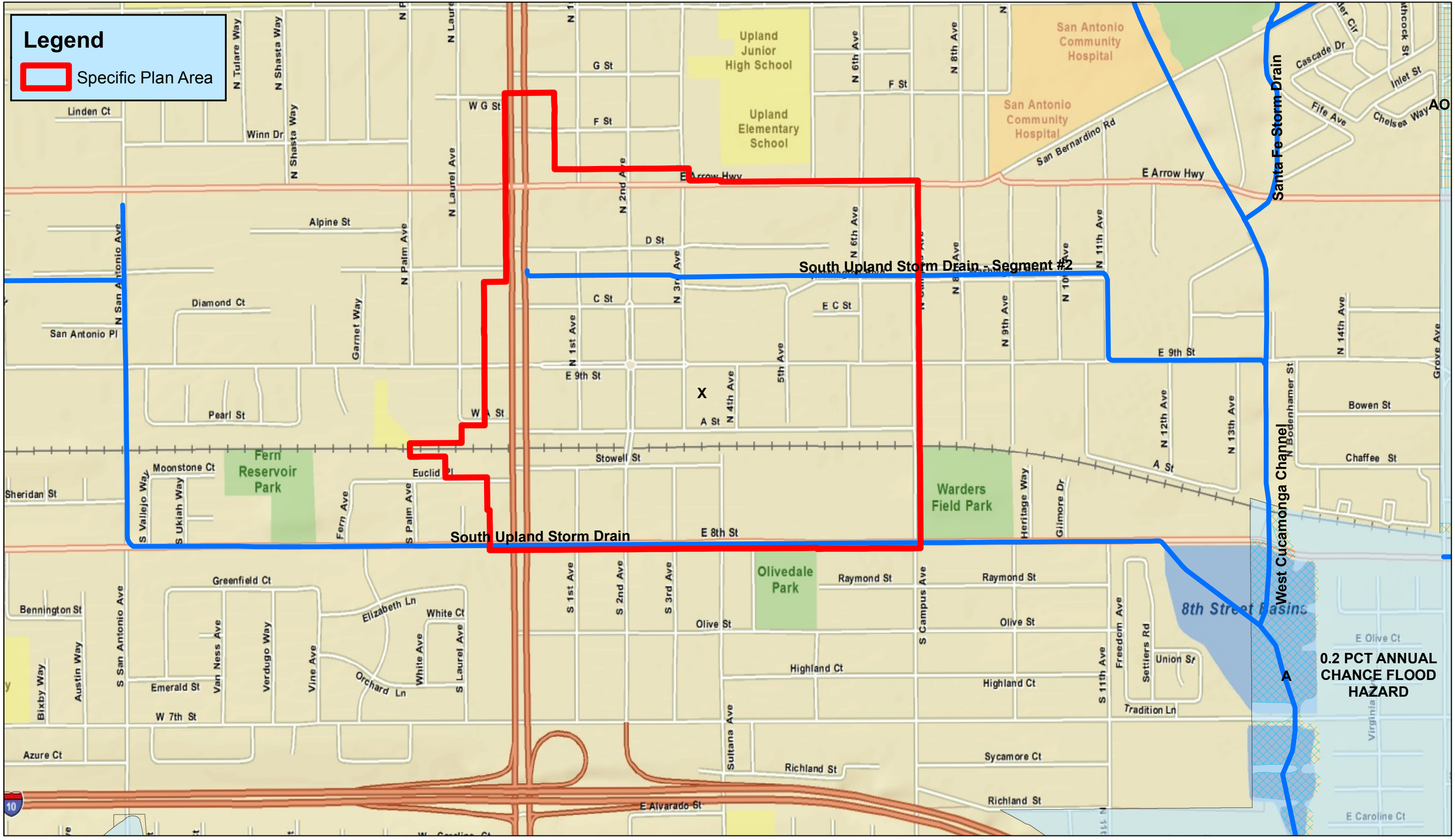


HISTORIC DOWNTOWN UPLAND STORM DRAIN SEGMENT MAP

LEGEND

- HISTORIC DOWNTOWN UPLAND BOUNDARY
- PROP. STORM DRAIN SEGMENT
- EXIST. STORM DRAIN LINES

SCALE: 1"=400'



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FEMA FLOODPLAIN
HISTORICAL DOWNTOWN SP PLAN
CITY OF UPLAND

APPENDIX G
Water Supply Assessment

DRAFT

Water Supply Assessment

(Senate Bill 610)

DOWN TOWN SPECIFIC PLAN

Prepared For:

City of Upland

Prepared By:

RBF CONSULTING

May 2010

I. Introduction

The Down Town Specific Plan consists of mixed use development and redevelopment in the City of Upland, California. Under the proposed Specific Plan land use type and density changes would occur over a twenty year period. Figure 1 shows the regional vicinity of the Down Town Specific Plan, located in the southern area of the City of Upland. The Specific Plan area and existing land uses are identified in Figure 2. As shown, the Specific Plan Area is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east and Euclid Avenue to the west. Existing land uses consist of: residential single family and multi-family, commercial, office, industrial, open space, institutional, public use, parking mixed use and park.

City of Upland Water Department is the water purveyor to the Specific Plan area. The City's Water Department serves domestic water from groundwater, imported water and surface water supplies. In addition, the City of Upland Water Department coordinates with the Inland Empire Utilities Agency (IEUA) regarding future opportunities to serve recycled water to offset domestic demands. Past, current and projected future water demand and supply for the City of Upland is addressed in the 2005 Urban Water Management Plan. Additionally, the City of Upland and Carollo Engineers prepared a 2010 Water System Master Plan Update which provides the most recent information on current and future water demand and supplies within the City's water service area.

II. Purpose of Report

The purpose for this report is summarized in Water Code section 10910.

Law

> Water Code section 10910 requires a city or county that determines a project is subject to the California Environmental Quality Act to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment, except as otherwise specified. The bill requires the assessment to include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.
>
> The bill prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with requirements relating to the submission of the assessment.
>
> The bill requires the public water system, or the city or county, as applicable, if that entity concludes that water supplies are, or will be, insufficient, to submit the plans for acquiring additional water supplies.
>
> The bill requires the city or county to include the water supply assessment and certain other information in any environmental document prepared for the project pursuant to the act.

This report is prepared as a technical study to the Down Town Specific Plan - Environmental Impact Report (EIR) per the California Environmental Quality Act (CEQA). In accordance with Water Code 10910 the City of Upland, as proposed water purveyor, must prepare a Senate Bill (SB) 610 ("Water Supply Assessment") report in support of the planned development / re-development. The purpose of the report is verification of that sufficient water supplies exist, or are planned for, to meet the water demand of the development.

NOT TO SCALE

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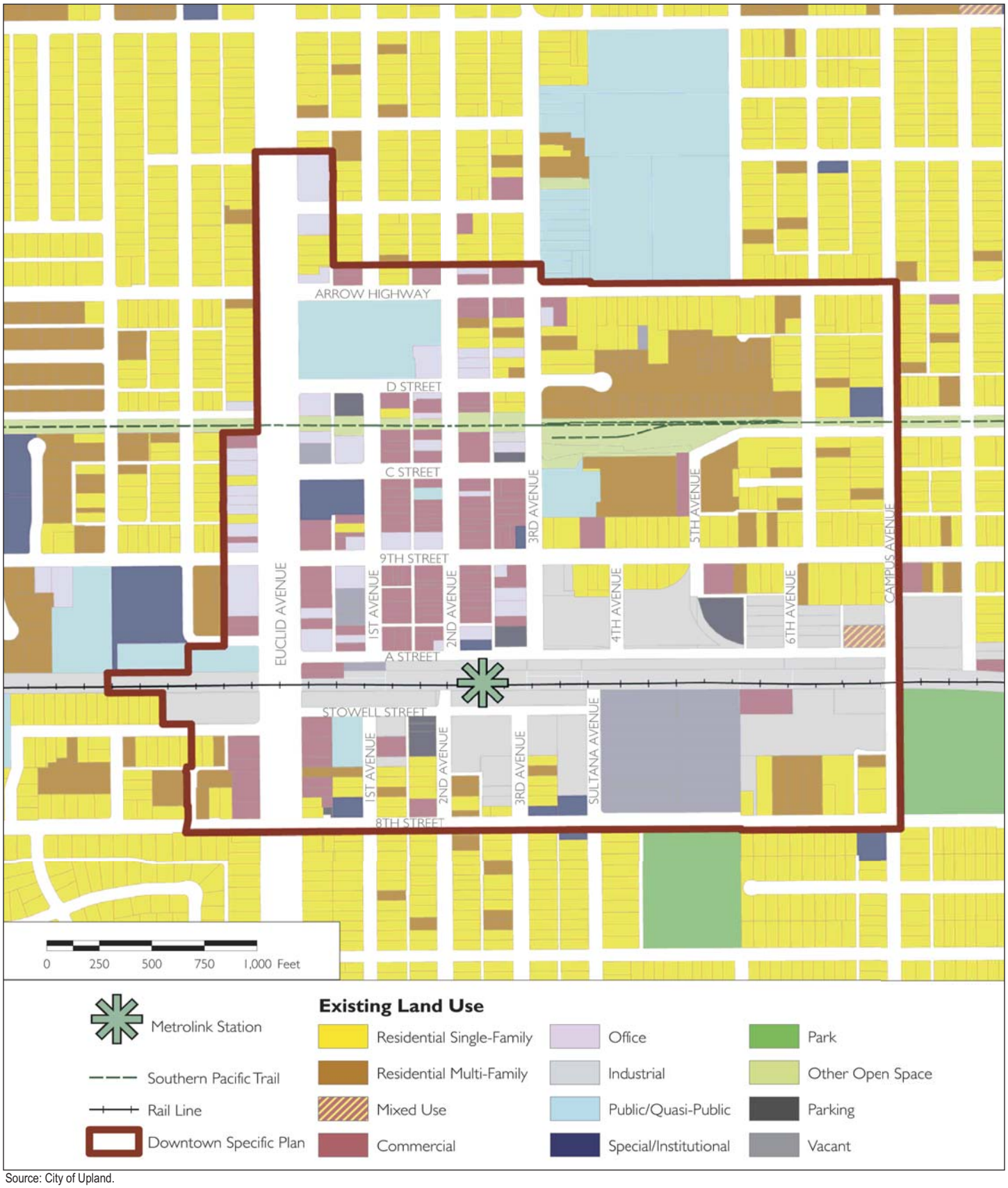
05/10 • JN 10-105851

DOWNTOWN UPLAND SPECIFIC PLAN

Regional Vicinity

Figure 1



Source: City of Upland.

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DOWNTOWN UPLAND SPECIFIC PLAN

Existing Land Uses

Figure 2

III. Project Description

The Down Town Specific Plan details proposed development / redevelopment on 143 acres in southern City of Upland. The existing land uses within the Specific Plan Area are summarized in Table 1.

Table 1 – Existing Land Use

Land Uses	Non-Residential (sf)	Residential (du)	Public Open Space (sf)	Off-Street Public Parking Spaces
Commercial/Retail	348,433			
Office	136,095			
Commercial/Flex	0			
Public/Institutional	79,176			
Industrial	518,057			
Single-Family Residential		179		
Multi-Family Residential		170		
Public Open Space			0	
Public Parking Spaces				1,012
Total	**1,081,761**	**349**	**0**	**1,012**

Source: Table 3-1 of the Historic Downtown Upland Specific Plan Environmental Impact Report May 2010

The Down Town Specific Plan will provide the basis for future development and public improvements in Downtown Upland. A community-driven approach to planning and development will be implemented in determining the land use plan and buildings to be constructed. For the purpose of analysis the City of Upland has developed a range of land use buildout values for use in the Specific Plan and Environmental Impact Report.

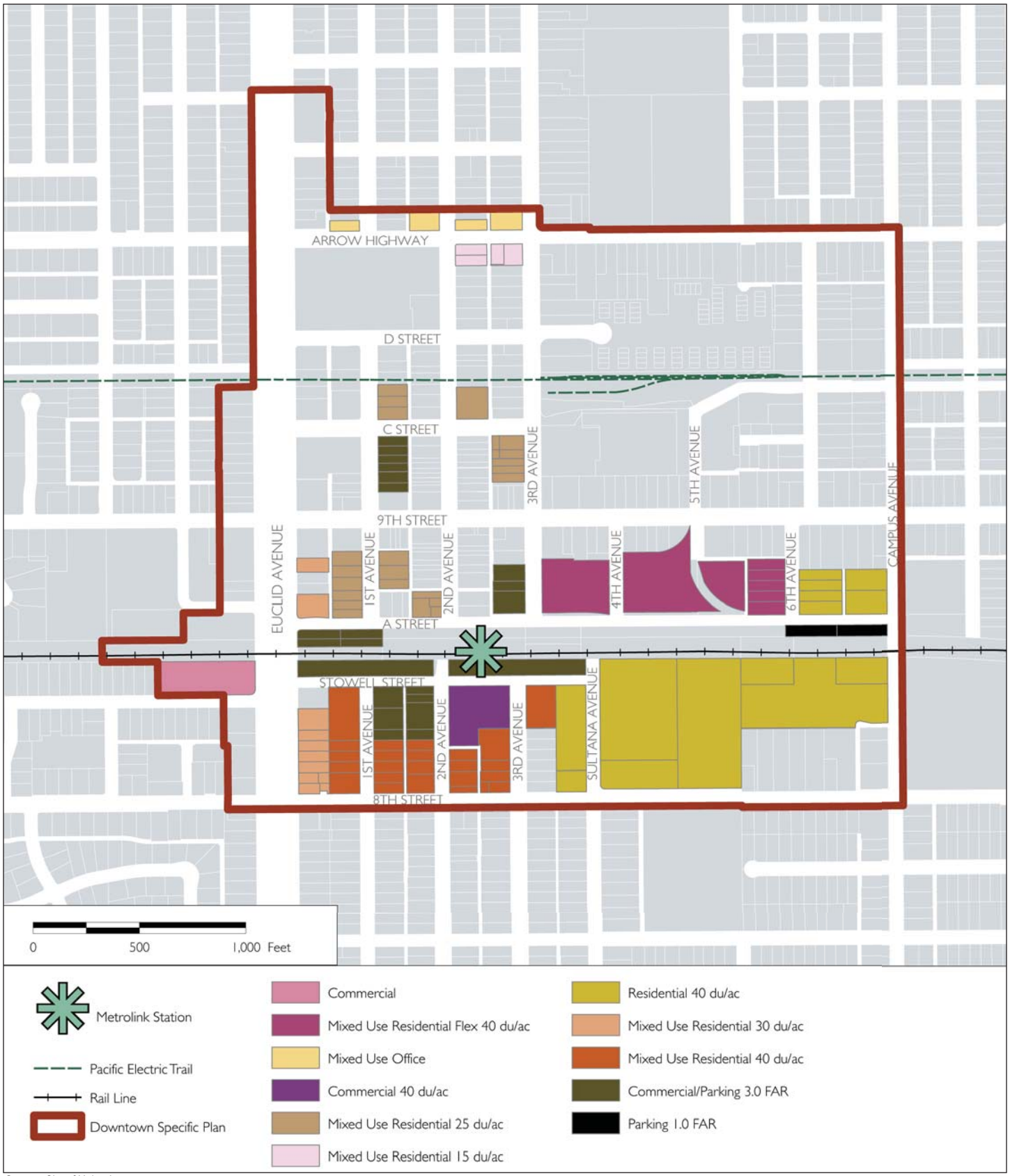
Table 2 compares the existing land uses (2009), with the highest land use values under consideration for Specific Plan buildout in the Environmental Impact Report. Figure 3 depicts the proposed land use.

Table 2 – Comparison of Existing to Proposed Land Use

Land Uses	Existing Uses (2009)	Unit	Specific Plan Buildout Estimate (2030)	Difference (Existing to Proposed)
Commercial/Retail	348,433	sf	518,433	170,000
Office	136,095	sf	186,095	50,000
Commercial/Flex	0	sf	50,000	50,000
Public/Institutional	79,176	sf	63,255	-15,921
Industrial	518,057	sf	46,762	-471,295
Single-Family Residential	179	du	161	-18
Multi-Family Residential	170	du	1,320	1,150
Public Open Space	0	sf	29,907	29,907
Public Parking Spaces	1,012	count	1,492	480

Source: Table 3-2 of the Historic Downtown Upland Specific Plan Environmental Impact Report May 2010

Development / redevelopment within the Down Town Specific Plan will occur within nine district areas as further described in the Environmental Impact Report. The earliest anticipated construction within the Down Town Specific Plan area will take place in 2011. Based on economic conditions, it is anticipated that build-out across the entire area will taken many year. For the purpose of current planning, it is assumed that build-out would occur by the year 2030.



Source: City of Upland.

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DOWNTOWN UPLAND SPECIFIC PLAN

Proposed Land Uses

Figure 3

IV. Identification of Public Water System

Law

> 10910. (b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined in Section 10912, that may supply water for the project. If the city or county is not able to identify any public water system that may supply water for the project, the city or county shall prepare the water assessment required by this part after consulting with any entity serving domestic water supplies whose service area includes the project site, the local agency formation commission, and any public water system adjacent to the project site.

City of Upland is the proposed water purveyor to the Down Town Specific Plan development. Domestic water supply in recent years by the the City of Upland Water Department has been approximately: 70-percent groundwater, 20-percent imported water, and 10-percent local surface water. The City of Upland has developed into a mostly residential and commercial community, that is approximately 95 percent built out. (Carollo 2010)

V. Project Applicability

Law

> 10910. (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.
>
> 10912. For the purposes of this part, the following terms have the following meanings:
> (a) "Project" means any of the following:
> (1) A proposed residential development of more than 500 dwelling units.
> (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
> (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
> (4) A proposed hotel or motel, or both, having more than 500 rooms.
> (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
> (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
> (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Down Town Specific Plan requires a “Water Supply Assessment” pursuant to Senate Bill 610, under Water Code 10912(a)(6). The development as outlined in the Specific Plan a ‘Project’ as defined by Water Code Section 10910, since the mixed-use project reflects an increase in residential dwelling units of more than 500.

VI. Schedule

Law

> 10910. (g) (1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.
>
> (2) Prior to the expiration of the 90-day period, if the public water system intends to request an extension of time to prepare and adopt the assessment, the public water system shall meet with the city or county to request an extension of time, which shall not exceed 30 days, to prepare and adopt the assessment.
>
> (3) If the public water system fails to request an extension of time, or fails to submit the assessment notwithstanding the extension of time granted pursuant to paragraph (2), the city or county may seek a writ of mandamus to compel the governing body of the public water system to comply with the requirements of this part relating to the submission of the water supply assessment.

The City of Upland is the proposed water purveyor. As lead to the Environmental Impact Report preparation, the City of Upland initiated the preparation of a 'Water Supply Assessment" to expedite/facilitate California Environmental Quality Act (CEQA) review and approvals.

VII. Water Demand

This section documents the existing and proposed project water demands determined for the Down Town Specific Plan development. For the 2010 Water Master Plan Update, the City of Upland and Carollo Engineers collected meter data and determined the water usage in the Down Town Specific Plan area for 2008. The water usage data was then used in preparing a memorandum summarizing existing, and projected future water demand at year 2030 to 2035, the estimated build-out of the Down Town Specific Plan area. The resulting memorandum entitled *Water Supply Evaluation for the Down Town Specific Plan* is provided as Appendix F.

EXISTING WATER DEMAND

Existing land use in the Down Town Specific Plan is summarized in Table 1, and includes areas of commercial, industrial, public use / institutional, residential and mixed use, parking and open space. As determined in the *Water Supply Evaluation for the Down Specific Plan* the existing water demand is 470 gallons per minute (gpm) or 760 AFY.

PROPOSED PROJECT WATER DEMAND

Proposed land use in the Down Town Specific Plan area is summarized in Table 2 and shown in Figure 3 As determined in the *Water Supply Evaluation for the Down Specific Plan* the proposed project water demand is 760 gallons per minute (gpm) or 1,225 AFY.

NET DEMAND CHANGE

The net change in water demand for the Project is the difference between the existing and the Project demand. For the Down Town Specific Plan development, an overall increase of 465 acre-feet per year (AFY) is calculated at build-out.

VIII. Urban Water Management Plan (UWMP) Review

Law

> 10910. (c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).
>
> (2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).
>
> (3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.
>
> (4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

City of Upland produced a 2005 Urban Water Management Plan (UWMP) according to Water Code 10610 describing the Company's past, present and future means of supplying water to its customers. The document describes the means of providing reliable water supply by the City of Upland. In 2009, the City of Upland contracted Carollo Engineers to prepare a water master plan update. The latest version of the 2010 Water Master Plan Update is the March 2010 Draft. It reflects the latest information on historic and future water demand and supply.

Supply System

City of Upland operates a domestic water distribution system supplied by:

1. Local Groundwater – from City owned wells and purchased local groundwater from the Chino, Cucamonga and Six groundwater basins.
2. Imported Water – from Metropolitan Water District and treated at the Aqua Lejos Water Treatment Plant of the Water Facilities Authority / Joint Powers Authority (WFA/JPA).
3. Surface Water – from San Antonio Canyon Creek per agreement with the San Antonio Water Company (SAWCo) and West End Consolidated Water Company (WECWCo).

Historically, the City of Upland Water Department has met 70-percent of its demands with groundwater, and the remaining 30-percent via a combination of imported and surface water. From 1998 to 2008 the City of Upland Water Department has served an average of between 17 and 22 million gallons per day. (Carollo 2010)

Project Identification

The City of Upland began its planning process for the Downtown Upland area in 2008. Hence, development as proposed under the Down Town Specific Plan was not identified in the City of Upland's 2005 Urban Water Management Plan.

However, in 2009 the City of Upland in conjunction with Carollo Engineers began preparation of the 2010 Water Master Plan Update. In the process, City of Upland staff requested Carollo Engineers prepare evaluation of water service for the Down Town Specific Plan, including determination of the existing and proposed project demands. In response, a memorandum entitled "Water Supply Evaluation for the Down Town Specific Plan" was prepared. The evaluation included a calculation of water demand for the Down Town Specific Plan based on available information at the time, and compared the net increase in demand against the available water supplies. See Appendix F.

Future Water Demand

Projections of future water demand by the City of Upland Water Department are provided in the 2005 Urban Water Management Plan, and 2010 Water Master Plan Update. The 2010 Water Master Plan Update provides the most current calculations of future water demand, accounting for all foreseen development projects up to the year 2030.

Further build out of the City is anticipated by development and redevelopment under the Down Town Specific Plan, and six projects identified in the 2010 Water Master Plan Update: 1) College Park, 2) Upland Crossing, 3) Park View, 4) Sports Park, 5) New Colonies (south of the 210 Freeway), 6) New Colonies (north of the 210 Freeway)

Both the 2005 Urban Water Management Plan and 2010 Water Master Plan Update anticipate growth and the need for planning, designing and constructing infrastructure in anticipation of the demand associated with new development projects in its service boundary. The 2010 Water Master Plan Update also addresses the City of Upland's plan to serve 900 acre-feet (AF) of recycled water by the year 2015, and 1,300 AF by 2020.

Table 4 provides the current projections of future water demand (as Table 2.7 of the 2010 WMPU).

Table 4 – Future Water Demand

Description	Average Day Demand (AFY)	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Phasing
Existing [1]	22,333	19.9	39.8	2008
College Park	178	0.2	0.3	2010
Upland Crossing	162	0.1	0.3	2015
Park View Promenade	173	0.2	0.3	2015
Sports Park	83	0.1	0.1	2015
New Colonies south of 210 Freeway	24	0.02	0.04	2015
New Colonies north of 210 Freeway	8	0.01	0.01	2015
Infill	1,201	1.1	2.1	2010 - 2030
Total Demand (year 2030)	**24,162**	**21.6**	**43.1**	**n/a**

[1] Estimate of existing demand for 2008.

Dry-Year Supplies

The 2005 Urban Water Management Plan analyzes how the City of Upland would meet water demands during multiple dry year periods up to 2025. The analysis is provided as Tables 5 to 8 of this report.

Table 5 – Multiple Dry Year Period Ending 2010

	(normal)	(single dry)	(multiple dry)	(multiple dry)	(multiple dry)
	2006	2007	2008	2009	2010
Groundwater Supply	16,016	17,425	18,480	19,018	19,536
% of projected normal entitlement	34%	37%	40%	41%	42%
Surface Water Supply	2,065	1,755	1,032	826	640
% of projected normal entitlement	4%	4%	2%	2%	1%
Imported Water Supply	4,261	1,260	1,260	1,260	1,260
% of projected normal entitlement	9%	3%	3%	3%	3%
Total	22,342	20,440	20,772	21,104	21,436

Based on Table 26 of the 2005 UWMP.

Table 6 – Multiple Dry Year Period Ending 2015

	(normal)	(single dry)	(multiple dry)	(multiple dry)	(multiple dry)
	2011	2012	2013	2014	2015
Groundwater Supply	15,821	17,046	18,101	18,639	19,157
% of projected normal entitlement	34%	36%	39%	40%	41%
Surface Water Supply	2,065	1,755	1,032	826	640
% of projected normal entitlement	4%	4%	2%	2%	1%
Imported Water Supply	6,300	3,299	3,299	3,299	3,299
% of projected normal entitlement	13%	7%	7%	7%	7%
Total	24,186	22,100	22,432	22,764	23,096

Based on Table 29 of the 2005 UWMP.

Table 7 – Multiple Dry Year Period Ending 2020

	(normal)	(single dry)	(multiple dry)	(multiple dry)	(multiple dry)
	2016	2017	2018	2019	2020
Groundwater Supply	18,378	19,418	20,473	21,011	21,529
% of projected normal entitlement	39%	42%	44%	45%	46%
Surface Water Supply	2,065	1,755	1,032	826	640
% of projected normal entitlement	4%	4%	2%	2%	1%
Imported Water Supply	5,588	2,587	2,587	2,587	2,587
% of projected normal entitlement	12%	6%	6%	6%	6%
Total	26,031	23,760	24,092	24,424	24,756

Based on Table 32 of the 2005 UWMP.

Table 8 – Multiple Dry Year Period Ending 2025

	(normal)	(single dry)	(multiple dry)	(multiple dry)	(multiple dry)
	2021	2022	2023	2024	2025
Groundwater Supply	19,111	19,966	21,021	21,560	22,078
% of projected normal entitlement	41%	43%	45%	46%	47%
Surface Water Supply	2,065	1,755	1,032	826	640
% of projected normal entitlement	4%	4%	2%	2%	1%
Imported Water Supply	6,700	3,699	3,699	3,699	3,699
% of projected normal entitlement	14%	8%	8%	8%	8%
Total	27,876	25,420	25,752	26,085	26,417

Based on Table 35 of the 2005 UWMP.

IX. Water Supply Entitlements, Water Rights or Service Contracts

Law

> 10910. (d) (1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.
> (2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:
> (A) Written contracts or other proof of entitlement to an identified water supply.
> (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
> (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.
> (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

The City of Upland has water supply rights and entitlements in the form of groundwater, surface water and imported water. A description of each is provided to follow.

Groundwater

City of Upland has groundwater rights in the Chino, Cucamonga and Six basins. Further description of groundwater right by basin, and agency (City of Upland, San Antonio Water Company or West End Consolidated Water Company) is provided in the Section X – Groundwater Basin Description, PWS Pumping, and Sufficiency Analysis.

Table 10 summarizes the capacity per basin and agreement / water right contact.

Surface Water

City of Upland receives surface water through its rights with San Antonio Water Company which is treated at the San Antonio Canyon Surface Water Treatment Plant (SACSWTP). San Antonio Creek and Tunnel supply water to the treatment plant. Annual water supplies vary significantly. As described in the 2005 Urban Water Management Plan, the amount of water available from the creek has ranged from 271 to 11,000 AF. Similarly, the amount from the tunnel has varied from 10 to 6,500 AF.

City of Upland has an entitlement to 68-percent of the SAWCo. water from the SACSWTP, for a maximum capacity of 5,236 AF.

Imported Water

City of Upland receives treated import water from Metropolitan Water District (MWD) of Southern California. The imported water is treated at the Water Facilities Authority / Joint Powers Authority Aqua Lejos Water Treatment Plant. City of Upland has a 23-percent entitlement in the Aqua de Lejos Water Treatment Plant, for a total capacity of 20,870 AF.

Table 10 – Water Supply Entitlements and Rights

Water Right / Entitlement	**Capacity (AFY)**
Groundwater	
- Chino Basin	7,778
- Cucamonga Basin	6,395
- Six Basins	6,503
Surface Water	
- San Antonio Canyon Surface Water Treatment Plant	5,236
Imported Water	
- Aqua de Lejos WTP (WFA / JPA w/ untreated water from MWD)	20,870
Total	46,782

Reclaimed Water

Add Text

X. Groundwater – Basin Description, PWS Pumping, and Sufficiency Analysis

Law

10910. (f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment:

(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

(2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water supply assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.

Groundwater Basin Descriptions

The City of Upland receives groundwater from three basins: Chino basin, Cucamonga basin, and Six basins. A description of each basin is provided to follow.

Chino Basin

The City of Upland overlies a portion of the northwestern area of the Chino Basin. A description of the boundary and geo-hydraulic composition of Chino Basin is provided as Appendix B, California's Groundwater Bulletin 118 – Chino Basin as prepared by the California Department of Water Resources.

In 1978 the Chino Basin was adjudicated, establishing an operating safe yield (OSY) of 140,000 acre-feet per year. The Judgement set an allocation of the safe yield under three categories: overlying Agricultural, Overlying Non-Agricultural, and the Appropriative Pool. City of Upland has rights to the Appropriative Pool for 5.202% of the safe yield, for 2,852.4 AFY.

In addition, the SAWCo has a water right to Chino Basin of 1,506.9 AF (2.748% of safe yield) and the WECWCo each has a water rights to the Chino Basin of 947.7 AF (1.728% of safe yield).

Cucamonga Basin

The City of Upland receives groundwater from the Cucamonga Basin. A description of the boundary and geo-hydraulic composition of Cucamonga Basin is provided as Appendix C, California's Groundwater Bulletin 118 – Cucamonga Basin as prepared by the California Department of Water Resources.

San Antonio Water Company and West End Consolidated Water Company have an agreement with the City of Upland to delivery ground water to the City from its water rights in the Cucamonga Basin. The Cucamonga Basin water rights are allocated according to a 1958 stipulated judgment. As initially allocated the basin had 24 stipulated parties. Now there are only three stipulated parties per the judgment: West End Consolidated Water Company, San Antonio Water Company and Cucamonga Valley Water District.

Per the stipulated judgment the SAWCo has rights to 6,500 AFY, and requires a spread of 2,000 AFY of imported / surface water from San Antonio Canyon Creek. Historically, the SAWCo has spread an annual average of 4,000 AFY. The WECWCo has rights to 750 AFY in the Cucamonga Basin.

Six Basins

The City of Upland receives groundwater from the Six Basins. A description of the boundary, characterization and condition of the basins is provided in Chapter IV – Groundwater Basin Reports San Gabriel Valley Basins – Six Basins.

Add text

Groundwater Production

Table 11 summarizes the total groundwater well production capacity and five year average annual production. .

Table 11 – Groundwater Capacity and Five Year Average Production

Well	Status	Zone	Production Well Capacity		Five Year Average	
			(gpm)	(AFY)	(gpm)	(AFY)
Well 1a	Active	5	1,050	1,694	650	1,049
Well 2	Inactive	5	650	1,049	0	0
Well 3	Active	1	878	1,416	485	782
Well 5	Active	4	1,070	1,726	736	1,187
Well 7a	Active	1	970	1,565	771	1,244
Well 8	Active	1	600	968	574	926
Well 9	Out of Service	1	0	0	0	0
Well 13	Out of Service	1	0	0	0	0
Well 15	Active	2	1,770	2,855	1,435	2,315
Well 17	Active	2	1,065	1,718	367	592
Well 20	Active	2	720	1,161	407	657
Well 21a	Active	1	970	1,565	727	1,173
SAWCo / WECWCo Wells	Active	2	8,425	13,591	3,750	6,049
Total	-	-	18,168	-	9,902	15,973

Based on Table 5.3 of the 2010 Water Master Plan Update

Groundwater Level Trends

Add text

Groundwater Quality

Groundwater quality concerns have presented in the Chino Basin, due to wells exceeding the maximum contaminant level (MCL) for nitrate and dibromochloropropane (DBCP).

Add text

State of the Basin

Add text

XI. Primary Issue for Assessment - Conclusion

(1) The City of Upland has been identified as the public water supplier for the Project.

(2) Water demand for the Down Town Specific Plan development is not specifically identified in the City of Upland's 2005 Urban Water Management Plan; however, the City of Upland has and continues to make steps in assuring water supplies exceed water demands for the future.

(3) The calculated water demand for the Project is 760 AFY (total water use), and it has been estimated that 1,225 AFY of water has historically been used to meet existing demands at the Project site.

(4) Thus, the estimated water demand at buildout is a net increase / decrease of 465 AF to the operation and planning of the City of Upland Water Department.

(5) The City of Upland proposes to deliver water the majority of water to the Project from the existing groundwater supplies of the Chino Basin, Six Basins and the Cucamonga Basin.

(6) City of Upland continues to……..

Therefore, the City of Upland concludes that sufficient water supply exists for water service to the Down Town Specific Plan.

Appendices

Appendix A - City of Upland 2005 Urban Water Management Plant
(by City of Upland and Kennedy Jenks Consultants)

Appendix B - California's Groundwater Bulletin 118 – Chino Basin
(by California Department of Water Resources)

Appendix C – California's Groundwater Bulletin 118 – Cucamonga Basin
(by California Department of Water Resources)

Appendix D – Chapter IV – Groundwawter Basin Reports
(by Metropolitan Water District)

Appendix E - City of Upland 2010 Water Master Plan Update
(by City of Upland and Carollo Engineers)

Appendix F – Water Supply Evaluation for the Down Town Specific Plan
(by City of Upland and Carollo Engineers)

APPENDIX H
Existing Hazardous Materials Conditions Assessment

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PLANNING ■ DESIGN ■ CONSTRUCTION

EXISTING HAZARDOUS MATERIALS CONDITIONS ASSESSMENT

For the

Historic Downtown Upland Specific Plan

Consultant:

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May 26, 2010

JN 10-105851

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this Existing Hazardous Material Conditions Assessment (Assessment) is to review the existing hazardous materials conditions within the boundaries of the approximate 210-acre Historic Downtown Upland Specific Plan (project site), located within the City of Upland, County of San Bernardino, State of California (Sections 7 and 8, Township 1 South [T.1S], Range 7 West [R.7W], San Bernardino Base and Meridian [SBBM]); refer to Exhibit 1, *Regional Vicinity*.

1.2 METHODOLOGY

The State of California Legislature enacted the California Environmental Quality Act (CEQA) in 1970 that requires public agencies to consider the environmental implications of proposed projects and disclose these findings to the public. This Assessment is intended to support the Hazardous Materials analysis per the Appendix G, *Environmental Checklist Form*, of the CEQA Statutes and Guidelines. The City of Upland (City) will have the primary responsibility for implementing CEQA and making sure that its mandates are followed for this project.

For the purposes of this Assessment, the term "hazardous material" refers to both hazardous substances and hazardous waste. A material is defined as "hazardous" if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as "hazardous" by such an agency. A "hazardous waste" is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity).

A visual site inspection of the project site was conducted on May 4, 2010 in concert with research of available Federal, tribal, State, and local regulatory databases. The site visit consisted of a visual examination of the project site for visual evidence of potential environmental concerns, including hazardous substances and petroleum products in connection with the on-site properties. This Assessment is not intended to provide specific qualitative or quantitative information as to the actual presence of hazardous materials at the site, but merely to identify the potential presence based on available information. This scope specifically excludes laboratory testing, field sampling, and chain of title documents. RBF's conclusions are based on the limitations of our Scope-of-Services.

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN
EXISTING HAZARDOUS MATERIALS CONDITIONS ASSESSMENT

Site Vicinity

RBF CONSULTING

5/12/10 JN 10-105851-16755 MAS

Exhibit 1

2.0 PROJECT SITE DESCRIPTION

2.1 LOCATION

The project site is generally bounded by Arrow Highway to the north, 8th Street to the south, Campus Avenue to the east, and Euclid Avenue to the west (refer to Exhibit 2, *Site Vicinity*). The project site extends slightly north of Arrow Highway along Euclid Avenue and slightly west of Euclid Avenue between 8th Street and Vernon Drive (refer to Exhibit 3, *Project site*). The Metrolink commuter rail line traverses the southern portion of the project site in an east/west direction. The Upland Metrolink Station is located within the project site at the intersection of 2nd Avenue and A Street.

2.2 PROJECT SITE GENERAL CHARACTERISTICS

On-site topography is approximately 1,180 to 1,275 feet above mean sea level (msl) and slopes to the south. The existing land uses within the project site include single-family and multi-family residential, commercial, office, industrial, public/quasi-public, and special/institutional uses. There are also large vacant parcels and surface parking lots on-site.

DRAINAGE

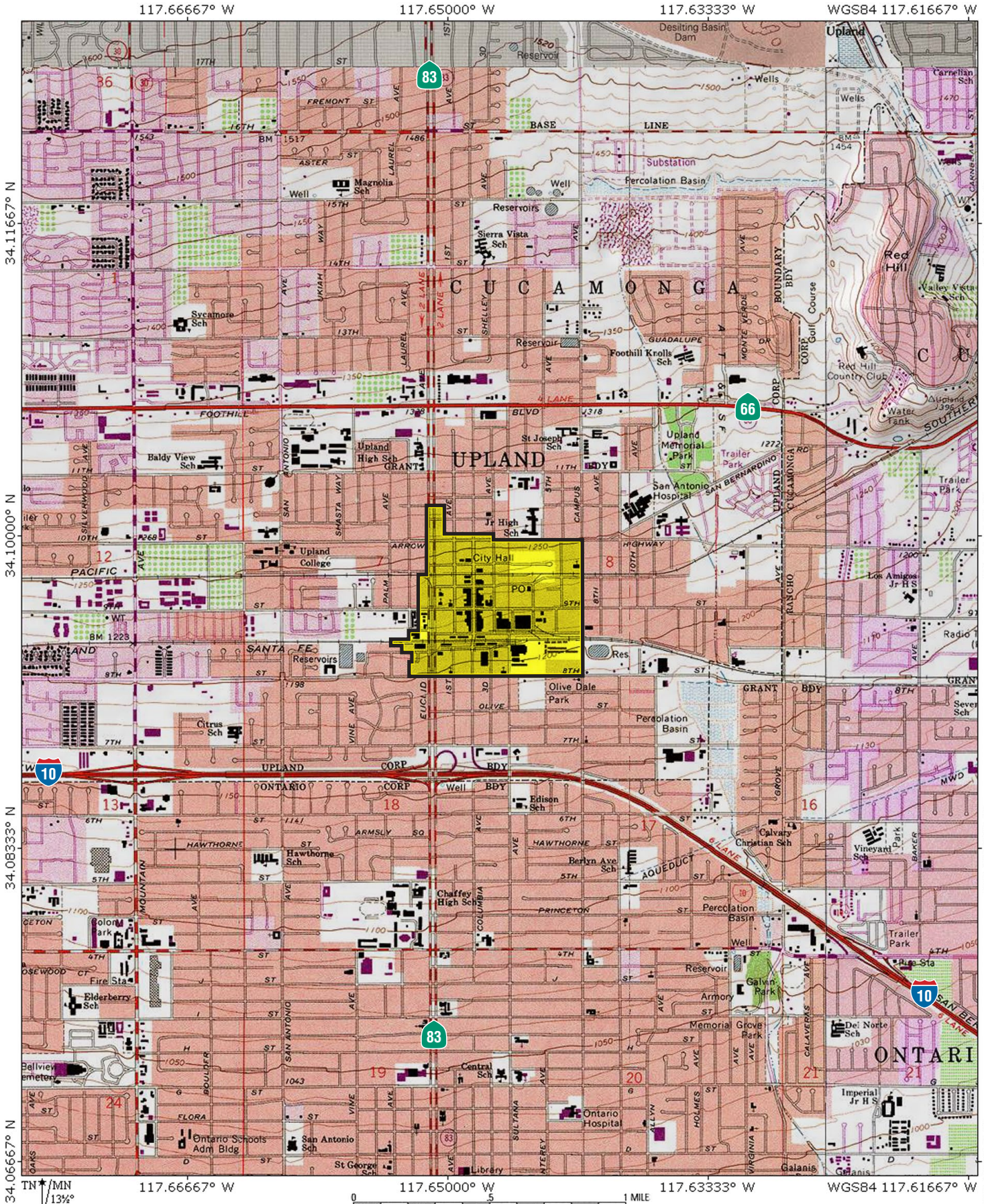
Drainage of the project site is accomplished by downward surface percolation and overland sheet flow, which generally follows topography in a southern direction. Also, RBF observed an improved storm drain system (i.e., curb, gutter, catch basins, etc.) within the boundaries of the project site.

2.3 CURRENT USES OF ADJOINING PROPERTIES

For the scope of this Assessment, properties are defined and categorized based upon their physical proximity to the project site. An adjoining property is considered any real property or properties the border of which is contiguous or partially contiguous with that of the project site, or that would be contiguous or partially contiguous with that of the project site but for a street, road, or other public thoroughfare separating them. An adjacent property is any real property located within ¼-mile of the project site's border. The following is a detailed description of each adjoining land use observed on May 4, 2010:

- North: Residential and institutional (i.e., Upland Elementary School) land uses are located to the north of the project site.

- East: Residential, industrial, and recreational (i.e., Warders Field Park) land uses are located to the east of the project site.



UPLAND DOWNTOWN SPECIFIC PLAN
EXISTING HAZARDOUS MATERIALS CONDITIONS ASSESSMENT

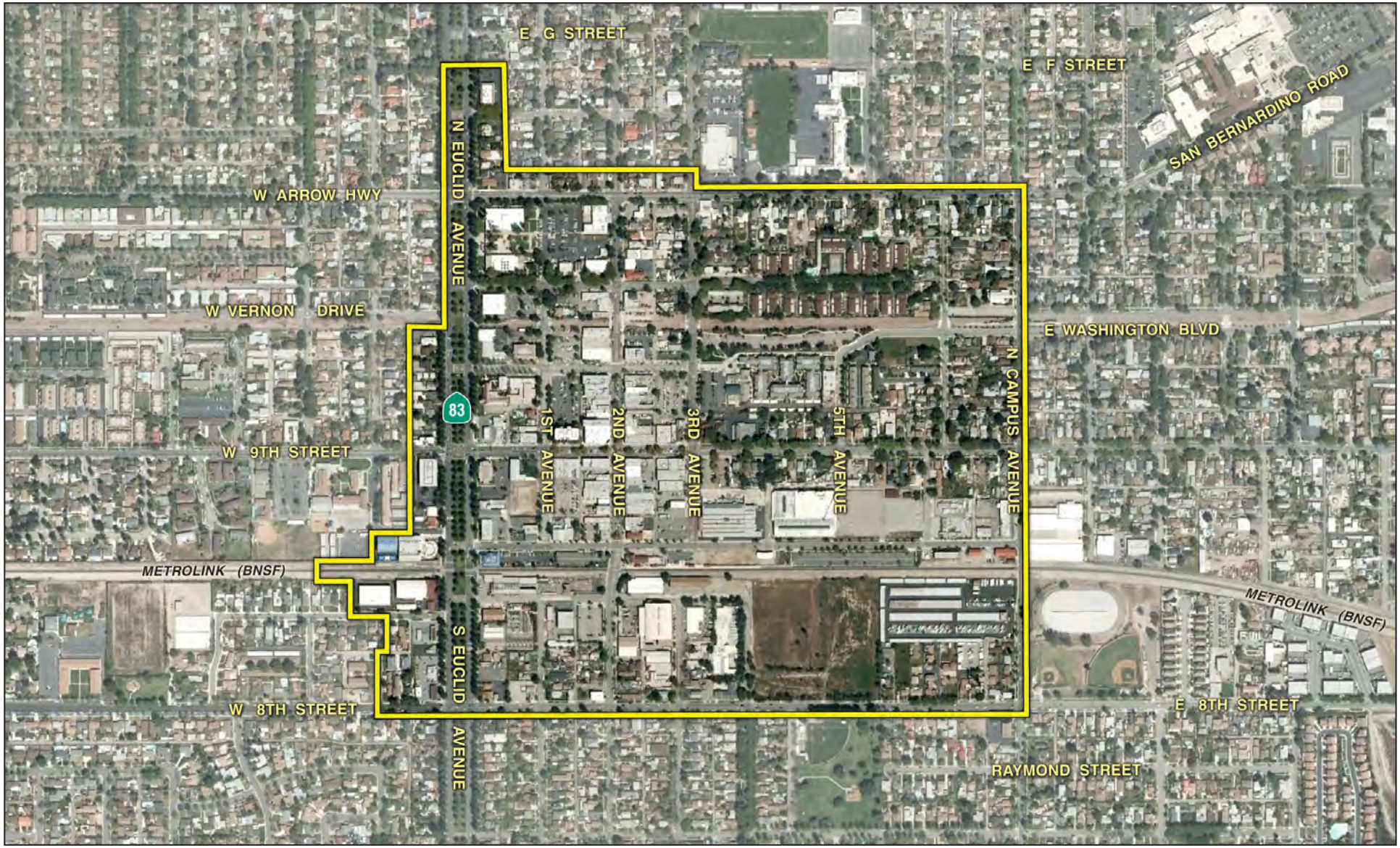
Site Vicinity

RBF CONSULTING

0 2500'
APPROXIMATE

5/12/10 JN 10-105851-16755 MAS

Exhibit 2



Subject Site

RBF CONSULTING

not to scale

5/12/10 JN 10-105851-16755 MAS

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN
EXISTING HAZARDOUS MATERIALS CONDITIONS ASSESSMENT

Subject Site

Exhibit 3

- South: Residential and recreational (i.e., Olivedale Park) land uses are located to the south of the project site.

- West: Residential, industrial, and institutional (i.e., Western Christian High School) land uses are located to the west of the project site.

2.4 PHYSICAL SETTING SOURCES

CURRENT USGS 7.5 MINUTE TOPOGRAPHIC MAP

The USGS topographic maps show geological formations and their characteristics, describing the physical setting of an area through contour lines and major surface features including lakes, rivers, streams, buildings, landmarks, and other geologic or infrastructure characteristics. Additionally, the maps depict topography through color and contour lines and are helpful in determining elevations and site latitude and longitude. For the purpose of this Assessment, the USGS topographic map was reviewed to determine on- and off-site factors that could impact the spread of contamination.

Based on the USGS *Ontario, California* Quadrangle, dated 1967 (photorevised 1981), on-site topography is approximately 1,190 to 1,255 feet above msl and gently slopes to the south. The project site appears to be built out and contains multiple large structures and seven (7) churches. The Southern Pacific Railroad (SPRR) and Atchison Topeka and Santa Fe Railroad (ATSFRR) are visible on-site and trend in an east-west direction. Generally, surrounding land uses appear to consist of developed land to the north, west, and south. Developed land and a percolation basin are noted to the east. Also, a junior high school is visible to the north, and Upland College is noted to the west.

GEOLOGY AND SOILS

The USGS Geological Map Index was searched by Environmental Data Resource, Inc. (EDR) for available geological maps that cover the project site and surrounding areas. These geological maps indicate geological formations that are overlaid on a topographic map. Some maps focus on specific issues (i.e., bedrock, sedimentary rocks, etc.) while others may identify artificial fills (including landfills). Geological maps can be effective in estimating permeability of on-site soils and other factors that influence the spread of contamination. According to the EDR GeoCheck Report, the project site is underlain by the Tujunga soil component. The Tujunga soil series is a Class A gravelly loamy sand, which includes high infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. This is not a hydric soil and has a moderate potential for corrosion of uncoated steel. The land consists of a stratified sequence from the Cenozoic era. The depth to bedrock is greater than 0 inches (refer to Appendix A, *EDR Database Search*).

GROUNDWATER AND WATER WELLS

The USGS Well Database and State Well Database were searched by EDR. According to the EDR Well Search, two (2) water wells are located within the boundaries of the project site. The compliance period for the water wells is reported to be from July 1, 1993 to December 31, 2025. Groundwater levels are not reported (refer to Appendix A). RBF assumes groundwater flow would follow the slope of the ground surface elevations towards the nearest open body of water or intermittent stream. The direction of this flow on-site is expected to be generally in a southerly direction. RBF did not observe on-site water wells during the May 4, 2010 site visit.

FLOOD HAZARDS

Flood Prone Area Maps published by the USGS show areas prone to 100-year floods overlaid on a topographical map. These maps are not considered the official Federal Emergency Management Agency (FEMA) flood maps; therefore, in cases where a property is located immediately adjacent to or within the flood prone boundary, a FEMA map should be obtained. According to the EDR GeoCheck Report, the project site is not located within a 100-year flood zone (refer to Appendix A). According to the Flood Insurance Rate Map (FIRM) obtained on FEMA's official website, dated August 28, 2008, the project site is not located within a 100-year flood zone (refer to Appendix B, *Documentation*).

3.0 RECORDS REVIEW

3.1 STANDARD ENVIRONMENTAL RECORD SOURCES

RECORDS SOURCES

As part of this Assessment, RBF has searched available records to determine if the project site includes any properties listed as a hazardous materials site per Government Code Section 65962.5. As part of this analysis, records have been obtained by EDR as well as the State Water Resources Control Board (SWRCB).

RBF requested EDR to conduct a governmental records search for properties located within the project site and within an approximate one-mile radius of the project site boundaries. Upon completion of their search, EDR provided RBF with their findings dated October 6, 2009. RBF makes no claims as to the completeness or accuracy of the referenced sources. Our review of EDR's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. To reduce the potential for omitting possible hazardous material sites located within the boundaries of the project site and within the surrounding area, sites may be listed in this report if there is any doubt as to the location because of discrepancies in map location, zip code, address, or other information. Refer to Appendix A for a listing and description of the federal and state records searched.

According to EDR's *ESA Report Desktop Reference*, dated 1996, some reported sites (Orphan Sites) are unmappable, as exact locations remain undefined. Listings in publicly available records that do not have adequate address information are not generally considered practically reviewable. For the purposes of this Assessment, practically reviewable is defined as information provided in a manner and in a form that yields information without the need for extraordinary analysis of irrelevant data. Although the location of these sites may be unknown, the site and detail information are often available through EDR. RBF's review of Orphan Sites consisted of a verification that the project site is not listed (i.e., referenced by name or street address) and a review to identify if any of the Orphan Sites cause a moderate to high potential to contaminate groundwater that underlies the project site. Refer to Appendix A for a listing and description of Orphan Sites.

RBF reviewed the State of California's GeoTracker database on May 5, 2010. GeoTracker was developed pursuant to a mandate by the California State Legislature to investigate the feasibility of establishing a statewide Geographic Information System (GIS) for leaking underground fuel tank (LUFT) sites and is maintained by the SWRCB. RBF searched the project site and vicinity on GeoTracker. RBF makes no claims as to the completeness or accuracy of GeoTracker; our review of GeoTracker's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. RBF searched all sites within the project site boundaries. Refer to Appendix B for the GeoTracker search documentation.

PROJECT SITE

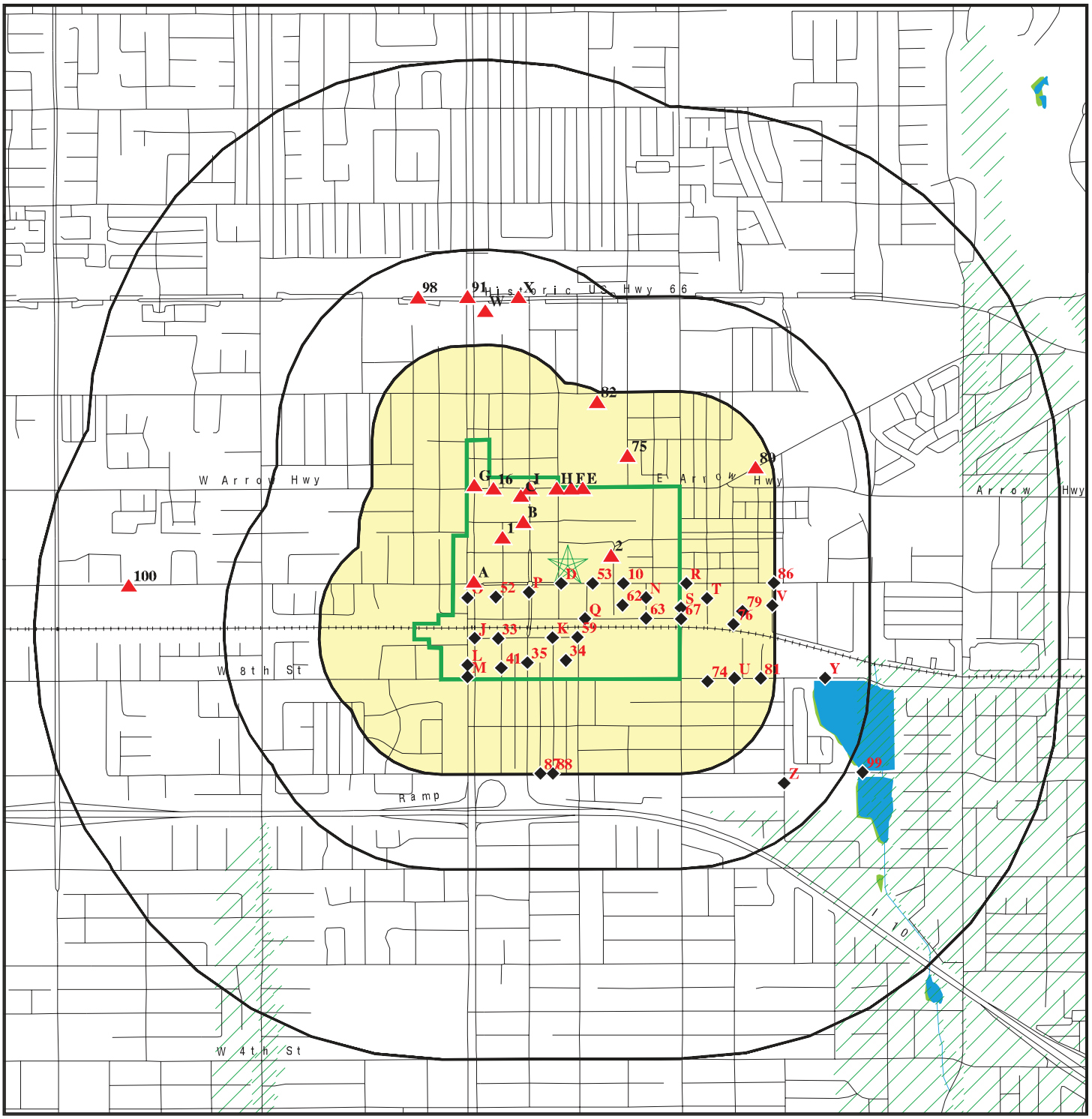
Available public records (provided by EDR and SWRCB) were reviewed by RBF on May 10, 2010; refer to Exhibit 4, *Overview Map*, for a mapping of reported regulatory properties. The lists that were reviewed reported 39 regulatory properties within the boundaries of the project site.

Properties Known to Handle, Store, and/or Maintain Hazardous Materials

The following properties are known to handle, store, and/or maintain hazardous materials within the boundaries of the project site:

- Abandoned USTs (164 North 3rd Avenue)[1]
- Antimite (142 North 6th Avenue)
- Antimite Associates (100 North 6th Street)
- Arco (193 South Euclid Avenue)
- ATI Windows (401 A Street)
- ATSF Right-of-Way (ATSF Upland Station)[1]
- Bee'z Auto Care (231 East Arrow Highway)
- Bob Lerouge Auto Repair (530 East 9th Street)
- City of Upland Fire Department Station 1 (475 North 2nd Avenue)
- City of Upland/Redevelopment (210/395 East A Street)[1]
- Drysdale's Union 76 (502 North Euclid Avenue)
- Earl Bennett Texaco Service (136 E Arrow Highway)[1]
- G & M Oil (159 South Euclid Avenue)
- Graves Automotive Supply (296 North 5th Avenue)
- Hall C W (256 East Arrow Highway)
- Ideal Cleaners (300 East Arrow Highway)
- La Verne Cooperative Citrus As (138 South 2nd Avenue)
- Mobil Station (204 North Euclid Avenue)
- Monroe J E (61 East Arrow Highway)
- Novotny Automatic Transmissions (259 East Arrow Highway)
- Old Ranchers Canning Co Inc (167 South Sultana Avenue)
- Plant # 13 (159 North 6th Avenue)
- Police Department (177 East D Street)
- Reinhold Lisle W Co (422 East 9th Street)
- Rugg Lumber (120 South Euclid Avenue)
- SAWC Maintenance Facility (172 South 1st Avenue)
- San Antonio West End Operating (139 North Euclid Avenue)
- San Antonio West End Operating (172 North 1st Avenue)
- SCE-Upland Substation (86 East Stowell Street)
- Scheu Manufacturing (395 West Stowell Street)

[1] Reported Orphan Site per EDR



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

0 1/4 1/2 1 Miles

Source: EDR, Inc., 2009

not to scale

5/12/10 JN 10-105851-16755 MAS

HISTORIC DOWNTOWN UPLAND SPECIFIC PLAN
EXISTING HAZARDOUS MATERIALS CONDITIONS ASSESSMENT

Overview Map

Exhibit 4

- Scheu Manufacturing Co Incorporated (297 East Stowell Street)
- Spring-Upland (345 North 1st Street)
- Steve Berg #14-015 (204 North Euclid Avenue)
- Tom-Son Cleaners (181 North 2nd Avenue)
- Unocal 76 Station (506 North Euclid Avenue)
- Upland Gas (177 East Arrow Highway)
- Upland Lemon Growers (392 East A Street)
- Upland Motor Services (310 East 9th Street)
- US Postal Service (333 East Arrow Highway)

Aboveground and Underground Storage Tanks

Based on the EDR Database Search, one (1) aboveground storage tank (AST) (SCE-Upland Substation located at 86 Stowell Street) is reported within the boundaries of the project site. The lists, which were reviewed, identified 19 reported current/historic UST locations which include:

- Abandoned USTs (164 North 3rd Avenue)
- Antimite (142 North 6th Avenue)
- Arco (193 South Euclid Avenue)
- City of Upland Fire Department Station 1 (475 North 2nd Avenue)
- Drysdale's Union 76 (502 North Euclid Avenue)
- Earl Bennett Texaco Service (136 E Arrow Highway)
- G & M Oil (159 South Euclid Avenue)
- La Verne Cooperative Citrus As (138 South 2nd Avenue)
- Mobil Station (204 North Euclid Avenue)
- Police Department (177 East D Street)
- Rugg Lumber (120 South Euclid Avenue)
- San Antonio West End Operating (139 North Euclid Avenue)
- SCE-Upland Substation (86 East Stowell Street)
- Scheu Manufacturing (297 East Stowell Street)
- Scheu Manufacturing (395 West Stowell Street)
- Unocal 76 Station (506 North Euclid Avenue)
- Upland Gas (177 East Arrow Highway)
- Upland Lemon Growers (392 East A Street)
- US Postal Service (333 East Arrow Highway)

Of these 19 reported locations, six (6) locations have reported Leaking Underground Storage Tanks (LUSTs). All six (6) LUST properties have received case closure and include:

- Arco (193 South Euclid Avenue) – **Case closed April 10, 2001**
- Drysdale's Union 76 (502 North Euclid Avenue) – **Case closed April 7, 1989**
- G & M Oil (159 South Euclid Avenue) – **Case closed April 29, 2004**
- Mobil Station (204 North Euclid Avenue) – **Case closed June 30, 1992**

- Police Department (177 East D Street) – **Case closed February 5, 1999**
- Scheu Manufacturing (297 East Stowell Street) – **Case closed April 5, 1994**

Spills

The following properties have reported spills within the boundaries of the project site:

- ATSF Right-Of-Way (ATSF Upland Station)[2]
- Steve Berg #14-015 (204 North Euclid Avenue)

Dry Cleaner Sites

According to the U.S. Environmental Protection Agency (USEPA), dry cleaners are known to use a significant amount of chemicals, such as perchloroethylne (perc), which pose environmental concerns. At the end of the dry cleaning process, the cleaning fluid is separated from waste water by distillation. In the past, the waste water was often poured down floor drains. Perc can seep through the ground and contaminate surface water, groundwater, and potentially drinking water. Since a small amount of perc can contaminate a large amount of water, properties within a close proximately to dry cleaners or past dry cleaner sites have been found to potentially have subsurface contamination. The following properties are reported Dry Cleaner sites located within the boundaries of the project site:

- Ideal Cleaners (300 East Arrow Highway)
- Tom-Son Cleaners (181 North 2nd Avenue)

Toxics and Criteria Pollutant Emissions Facilities

The following properties are Toxics and Criteria Pollutant Emissions Facilities reported within the boundaries of the project site:

- Ideal Cleaners (300 East Arrow Highway)
- Old Ranchers Canning Co Inc (167 South Sultana Avenue)
- Scheu Manufacturing Co Incorporated (297 East Stowell Street)
- Tom-Son Cleaners (181 North 2nd Avenue)

OFF-SITE PROPERTIES

Public records identified 23 additional listed regulatory sites located within a one-mile radius of the project site. Off-site properties are known to handle, store, and/or maintain hazardous materials; however, the potential for contaminated groundwater to underlie the project site, as a result of these off-site regulatory properties, is considered to be low due to the groundwater

[2] Reported Orphan Site per EDR

flow direction from the project site, distance from project site, and/or the status of the identified sites.

3.2 HISTORICAL USE INFORMATION ON THE PROJECT SITE AND ADJOINING PROPERTIES

STANDARD HISTORICAL SOURCES

The following historical and regulatory information is based upon the review of available historical maps and documents, available public information, interviews, and a review of a series of historical aerial photographs (dating from 1938 to 2005).

Historical Aerial Photograph Review

RBF reviewed available aerial photographs for the project site and immediately adjacent areas to assist in the identification of development activities that have historically occurred on-site. Review of available historical aerial photographs dated 1938 through 2005 provided the following chronological sequence of site history. The aerial photographs were provided by EDR and are included in Appendix B.

1938: In the 1938 aerial photograph, the project site appears to consist of multiple residential and commercial structures, agricultural uses, vacant land, and improved roadways. Railroad uses are visible in the central and southern portions of the project site trending in an east/west direction. Surrounding land uses appear to consist of residential uses, agricultural uses, and vacant land.

1949-1977: In the 1949 through 1977 aerial photographs, the project site appears to consist of multiple structures, agricultural uses, vacant land, and improved roadways. A portion of the vacant land at the southern end of the project site observed in the 1938 aerial photograph has been developed in the 1949 aerial photograph. Some agricultural land appears to have been graded in the 1969 aerial photograph. Railroad uses are visible in the central and southern portions of the project site trending in an east/west direction. Surrounding land uses appear similar to those viewed in the 1938 aerial photograph.

1990-1994: In the 1990 and 1994 aerial photographs, the project site appears to consist of multiple structures, vacant land, and improved roadways. The agricultural uses previously noted on the project site have been developed. Railroad uses are visible in the central and southern portions of the project site trending in an east/west direction. Surrounding land uses appear to consist of increasing

residential uses, agricultural uses, and vacant land, which appear similar to that viewed in the 1949 through 1977 aerial photographs.

2002-2005: In the 2002 and 2005 aerial photographs, the project site appears to consist of multiple structures, vacant land, and improved roadways. The agricultural uses previously noted on the project site have been built out and contain multiple structures. The railroad use in the central portion of the project site is not visible in the 2002 through 2005 aerial photographs. Surrounding land uses appear similar to that viewed in the 1990 through 1994 aerial photographs.

Based on review of the above-referenced historical aerial photographs, the project site appears to have primarily consisted of multiple structures, agricultural land uses, vacant land, improved roadways, and railroad uses.

Sanborn Map Review

Sanborn maps contain detailed drawings, which indicate the location and use of structures on a given property during specific years. These maps were originally produced to show buildings in sufficient detail for insurance underwriters to evaluate fire risks and establish premiums, but now are utilized as a valuable source of historical and environmental risk information. RBF requested available historical Sanborn Fire Insurance Maps for the project site from EDR. EDR provided Sanborn Maps dated 1907 through 1955, which contained the project site and immediate surrounding area. Review of available Sanborn Maps dated 1907 through 1955 for the project site provided the following chronological sequence of site history (refer to Appendix B):

1907-1912: In the 1907 and 1912 Sanborn Maps, the project site appears to consist of roadways (2nd Avenue, 3rd Avenue, 4th Avenue, C Street, D Street, and East 9th Street) and multiple structures, including residential structures, a skate rink, church, and feed stores. The project site also contains several vacant parcels. The 1912 Sanborn Map shows more structures than the 1907 Sanborn Map. It should be noted that only the central portion of the project site (approximately bounded by D Street, 5th Avenue, A Street, and 2nd Avenue) is included on the 1907 and 1912 Sanborn Maps.

1928-1932: In the 1928 through 1932 Sanborn Maps, the project site appears to consist of roadway uses (2nd Avenue, 3rd Avenue, 4th Avenue, C Street, D Street, and East 9th Street) and multiple structures. Development appears to have increased compared to the 1912 Sanborn Map. Residential structures are visible as well as commercial structures including a movie store, auto sales, barber shops,

church, and banks. Vacant parcels are also noted on the 1928 through 1932 Sanborn Maps. It should be noted that only the central portion of the project site (approximately bounded by D Street, 5th Avenue, A Street, and 2nd Avenue) is included on the 1928 through 1932 Sanborn Maps.

1950-1955: In the 1950 and 1955 Sanborn Maps, the project site appears to consist of roadway uses (2nd Avenue, 3rd Avenue, 4th Avenue, C Street, D Street, and East 9th Street) and multiple structures similar to those identified in the 1928 through 1932 Sanborn Maps. Development on the project site appears to have increased in the 1950 and 1955 Sanborn Maps. Vacant parcels remain visible. It should be noted that only the central portion of the project site (approximately bounded by D Street, 5th Avenue, A Street, and 2nd Avenue) is included on the 1950 and 1955 Sanborn Maps.

Based on the review of the above referenced Sanborn Maps, the project site appears to have consisted of roadway uses (2nd Avenue, 3rd Avenue, 4th Avenue, C Street, D Street, and East 9th Street) and multiple structures. However, only a portion of the project site was included on the Sanborn Maps (approximately bounded by D Street, 5th Avenue, A Street, and 2nd Avenue).

Historical Topographic Map Review

RBF reviewed historical topographic maps dated 1901 through 1981 for the project site and adjacent areas provided by EDR. Review of available historical topographic maps provided the following chronological sequence of site history. Copies of the historical topographic maps as well as the most recent topographic map are included in Appendix B.

1901-1903: In the 1901 and 1903 USGS *Southern CA Sheet 1* and *Cucamonga, California* Quadrangles, the project site consists of multiple roadways. The *Southern CA Sheet 1* topographic map is a 60 Minute (') Series map, which does not show much detail. The *Cucamonga* topographic map is a 15 Minute (') Series map in which towns, rivers, peaks, and major land features are generally labeled; however, specific detail (structures and elevations, etc.) remains undefined. Elevation appears to be approximately 1,190 to 1,260 feet above msl. Sparse structures are noted on the project site on the 1903 topographic map. The Atchison Topeka and Santa Fe Railroad is visible traversing the project site in an east-west direction. Surrounding land uses appear to consist of sparse structures and infrastructure. The project site appears to be located within the developing area of North Ontario in the 1901 topographic map. The City of Ontario, and developing areas of Cucamonga, North Cucamonga, and Claremont are visible in the vicinity of the project site. No on-site pits, ponds, or lagoons were noted on the 1901 and 1903 topographic maps.

1942-1954: In the 1942 and 1954 USGS *Ontario and Vicinity,* and *Ontario, California* Quadrangles (both 7.5' Series maps), on-site topography appears to be approximately 1,190 to 1,255 feet above msl. On the 1942 topographic map, the project site appears to consist of improved roadways and multiple large structures. Roadways appear to be further improved on the 1954 topographic map, and the project site appears to be built out. The Atchison Topeka and Santa Fe and Pacific Electric Railroads are noted on the project site. Agricultural uses are visible to the west of the City of Upland. Undeveloped uses are noted to the north and west of the City of Upland, and developed uses are visible to the south. Multiple schools are noted surrounding the project site. A four (4)-lane freeway is visible to the south of the project site. Two (2) reservoirs are visible to the southwest and southeast of the project site, south of the Atchison Topeka and Santa Fe Railroad. No on-site pits, ponds, or lagoons were noted on the 1942 and 1954 topographic maps.

1967-1981: In the 1967 through 1981 USGS *Ontario, California* Quadrangles (all 7.5' Series maps), the project site appears to be built out and contains multiple large structures. On-site and surrounding roadways appear to be further improved in 1967 compared to the 1954 topographic map. The City of Upland appears to be significantly more built out in the 1967 through 1981 topographic maps than the 1954 topographic map. Developed uses are noted to the north, east, and south of the project site and the City of Upland. Former agricultural uses to the west of the project site are nearly built out in the 1981 topographic map. The freeway to the south of the project site consists of six (6) lanes and visible on- and off-ramps in the 1967 through 1981 topographic maps. No on-site pits, ponds, or lagoons were noted on the 1967 through 1981 topographic maps.

Based on review of the above-referenced historical topographic maps, the project site appears to have consisted of multiple on-site structures, roadways, and railroads.

California Department of Oil, Gas, and Geothermal Resources

RBF reviewed a Wildcat Map provided by the California Department of Oil, Gas, and Geothermal Resources (DOGGR). These maps indicate existing and historical oil and gas wells within the immediate vicinity of the project site. Current well status for any well indicated on the Wildcat Maps should be confirmed at the appropriate Division of Oil and Gas District Office. According to the Wildcat Map W1-4, Orange, Riverside, and San Bernardino Counties, dated February 22, 2004, the project site does not appear to be located in a sedimentary basin with oil, gas, or geothermal production. No wells were visible within the vicinity of the project site (refer to Appendix B).

4.0 SITE RECONNAISSANCE

RBF observed multiple land uses within the project site during the May 4, 2010 site visit; refer to Exhibit 5, *On-Site Photographs*. Land uses observed consisted of residential, commercial, office, industrial, public, institutional, park, and open space. Additionally, RBF observed railroad right-of-way and other utilities including but not limited to water facilities, overhead power lines, and sewer manholes on-site.

The ATSFRR trends the southern portion of the project site in an east west direction. Commercial and industrial uses as well as the Upland Metrolink Station were observed along the ATSFRR. Commercial uses along the ATSFRR consisted of an IHOP restaurant, Ace Hardware, Pacific Wine Merchants, Superior Signs, UHaul, and other unnamed commercial and light industrial uses. Parking and vacant land uses were also observed along the ATSFRR. Industrial uses consisted of historical rail yards, warehouses, and loading docks.

The majority of the public uses observed during the site visit were located in the northwestern portion of the project site. Public uses consisted of the Upland Public Library, City Hall, Upland Fire Department, and Upland Unified School District. Other uses in the northwestern portion of the project site consisted of commercial, single-family residential, institutional, office and park uses. Additionally, multiple properties consisting of auto repair shops and properties that appeared to be historically used as gas stations were observed in the northwestern portion of the project site.

The primary land uses observed in the northeastern portion of the project site included single-family residential uses. Sparse institutional and commercial uses were also observed in this area. Commercial, industrial, sparse residential, and vacant land uses were observed in the southeastern portion of the project site. Bob Lerouge Auto Repair was observed at the corner of 5th Avenue and A Street. Gas stations consisting of Chevron and Arco were observed in the southwestern portion of the project site. Also, the southwestern portion of the project site consisted of Upland Auto Repair, Hoyts Ace Hardware and lumber yard, Public Storage, and a substation. The center of Downtown appeared to be located along 2nd Avenue from A Street to East 9th Street. RBF observed commercial uses consisting primarily of restaurants and retailers as well as parking uses in the Downtown area. RBF observed a public walkway along the alignment of the historic railroad noted through documentation review in the central portion of the project site.

RBF observed several lots that appeared to be historically used as gas stations. Also, multiple current gas stations and auto repair shops are also present. Industrial areas were primarily located along the ATSFRR. Off-site uses consisted of institutional, residential, and commercial to the north; residential, industrial, and commercial to the east; residential and public to the south; and institutional, residential, commercial, and industrial to the west. Valero Gas was observed adjoining the eastern boundary of the project site immediately south of East 9th Street.

View of on-site gas station located in the southwestern portion of the subject site.

View of on-site railroad uses and Metrolink station.

View of on-site property that appears to be a historical gas station located in the northeastern portion of the subject site.

View of historical industrial warehouse uses located adjacent to the on-site railroad.

5.0 CONCLUSIONS

The following conclusions are based upon review of reasonably ascertainable referenced material available to RBF during the preparation of this Assessment, which included historical aerial photographs, historical topographic maps, regulatory databases, interviews, and a site visit.

5.1 RAILROAD RIGHT-OF-WAY

RBF observed the Upland Metrolink (historically known as the ATSFRR) track which traverses the southern portion of the project site in an east/west direction. Additionally, historical topographic maps revealed the SPRR which trended the central portion of the project site in an east/west direction. During the May 4, 2010 site visit, this historic railroad alignment appeared to be used for a pedestrian trail.

Active and inactive railroad beds frequently have concentrations of petroleum products and lead elevated above natural background conditions. Petroleum product concentrations and lead concentrations are derived from drippings from rail vehicles and flaked paint, respectively. Wooden railroad ties may contain preservatives (i.e., creosote), some of which may contain hazardous constituents. Track switch locations often have elevated levels of petroleum hydrocarbons. Inorganic and organic herbicides, along with diesel fuel, may have been used for vegetation control. Due to the existing and historic railroad alignments, which traversed the project site, the presence of gasoline, diesel, and/or creosote within soil surrounding the railroad alignment is likely. It should be noted that RBF did not conduct environmental sampling as part of this Assessment.

5.2 HISTORICAL USES

Visible evidence suggesting the past use of historical gas stations was observed within the boundaries of the project site. Multiple historic industrial/commercial operations included the use of hazardous materials as well. Historic industrial/commercial use properties appeared to be located on asphalt, concrete, gravel materials, and bare soils. Due to the evidence of past uses associated with vacant and operating structures, the presence of soil contamination or historic underground storage tanks is likely.

5.3 CURRENT USES

ON-SITE REGULATORY PROPERTIES

Approximately 39 listed on-site properties have reported the maintenance, storage, and/or use of hazardous materials and include:

- Abandoned USTs (164 North 3rd Avenue)

- Antimite (142 North 6th Avenue)
- Antimite Associates (100 North 6th Street)
- Arco (193 South Euclid Avenue)
- ATI Windows (401 A Street)
- ATSF Right-of-Way (ATSF Upland Station)
- Bee'z Auto Care (231 East Arrow Highway)
- Bob Lerouge Auto Repair (530 East 9th Street)
- City of Upland Fire Department Station 1 (475 North 2nd Avenue)
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- Spring-Upland (345 North 1st Street)
- Steve Berg #14-015 (204 North Euclid Avenue)
- Tom-Son Cleaners (181 North 2nd Avenue)
- Unocal 76 Station (506 North Euclid Avenue)
- Upland Gas (177 East Arrow Highway)
- Upland Lemon Growers (392 East A Street)
- Upland Motor Services (310 East 9th Street)
- US Postal Service (333 East Arrow Highway)

Of the 39 regulatory properties, one (1) AST (SCE-Upland Substation located at 86 Stowell Street) is reported within the boundaries of the project site. Also, 19 current/historic UST locations are reported within the project site. The 19 reported UST locations include:

- Mobil Station (204 North Euclid Avenue)
- Police Department (177 East D Street)
- Upland Gas (177 East Arrow Highway)
- City of Upland Fire Department Station 1 (475 North 2nd Avenue)
- US Postal Service (333 East Arrow Highway)
- Unocal 76 Station (506 North Euclid Avenue)
- Drysdale's Union 76 (502 North Euclid Avenue)
- SCE-Upland Substation (86 East Stowell Street)
- La Verne Cooperative Citrus As (138 South 2nd Avenue)
- Rugg Lumber (120 South Euclid Avenue)
- Scheu Manufacturing (297 East Stowell Street)
- G & M Oil (159 South Euclid Avenue)
- Arco (193 South Euclid Avenue)
- San Antonio West End Operating (139 North Euclid Avenue)
- Upland Lemon Growers (392 East A Street)
- Antimite (142 North 6th Avenue)
- Scheu Manufacturing (395 West Stowell Street)
- Abandoned USTs (164 North 3rd Avenue)
- Earl Bennett Texaco Service (136 E Arrow Highway)

Of these 19 reported UST locations, six (6) locations have reported LUSTs. All six (6) LUST properties have received case closure and include:

- Arco (193 South Euclid Avenue) – **Case closed April 10, 2001**
- Drysdale's Union 76 (502 North Euclid Avenue) – **Case closed April 7, 1989**
- G & M Oil (159 South Euclid Avenue) – **Case closed April 29, 2004**
- Mobil Station (204 North Euclid Avenue) – **Case closed June 30, 1992**
- Police Department (177 East D Street) – **Case closed February 5, 1999**
- Scheu Manufacturing (297 East Stowell Street) – **Case closed April 5, 1994**

Two (2) spills are reported within the boundaries of the project site and include:

- ATSF Right-Of-Way (ATSF Upland Station)
- Steve Berg #14-015 (204 North Euclid Avenue)

The following dry cleaner facilities are reported on-site:

- Ideal Cleaners (300 East Arrow Highway)
- Tom-Son Cleaners (181 North 2nd Avenue)

Four (4) properties have reported regulated releases of hazardous materials to the air and include:

- Ideal Cleaners (300 East Arrow Highway)
- Old Ranchers Canning Co Inc (167 South Sultana Avenue)
- Scheu Manufacturing Co Incorporated (297 East Stowell Street)
- Tom-Son Cleaners (181 North 2nd Avenue)

POTENTIAL SOIL AND/OR GROUNDWATER CONTAMINATION

LUSTs

Although all of the on-site LUST sites have reported case closure, the potential for soil and/or groundwater contamination associated with all reported UST locations remains moderate to high.

Spills

Two (2) spills have occurred within the boundaries of the subject site. No details regarding the spill locations were obtained during the course of this Assessment. Since the spill sites have not reported completion/closure, the potential for soil/groundwater contamination associated with the spill locations is moderate to high.

Drycleaners

Two (2) drycleaners are reported to be located on-site. Due to the presence of the two (2) on-site drycleaners, the potential for soil/groundwater contamination associated with all drycleaner locations is moderate to high.

HAZARDOUS MATERIALS EMITTERS

Four (4) reported on-site facilities are known to emit hazardous materials into the air.

5.4 ASBESTOS-CONTAINING MATERIALS

Asbestos is a strong, incombustible, and corrosion-resistant material that was used in many commercial products, beginning before the 1940s and continuing until the early 1970s. If inhaled, asbestos fibers can result in serious health problems. Asbestos-containing materials (ACMs) are building materials containing more than one percent asbestos. Many of the existing structures present within the project site may have been built prior to 1978. Therefore, the potential for ACMs to be found in the project site is considered likely.

5.5 LEAD-BASED PAINTS

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, many homes were treated with paint containing some amount of lead. It is estimated that over 80 percent of all housing built prior to 1978 contains some lead-based paint (LBP). The mere presence of lead in paint may not make a material to be considered hazardous. In fact, if in good condition (no flaking or peeling), most intact LBP is not considered to be a hazardous material. In poor condition, LBPs can create a potential health hazard for building occupants, especially children. Many of the existing structures present within the project site may have been built prior to 1978. Therefore, the potential for LBPs to be found within the boundaries of the project site is considered likely.

6.0 LIST OF PREPARERS

RBF Consulting
Mr. Richard Beck, REA, CEM. *Environmental Project Manager*
Mr. Kristen Bogue, REA, CEI. *Environmental Analyst*
Mr. Wesley Salter, CEI. *Environmental Analyst*

7.0 REFERENCES

Date	Approximate Scale	Source
1938	1′=555′	Laval
1949	1′=500′	Fairchild
1953	1′=555′	Southwestern
1969	1′=600′	AMI
1977	1′=666′	Teledyne
1990	1′=666′	USGS
1994	1′=666′	USGS
2002	1′=666′	USGS
2005	1′=604′	EDR

Note: 1938-2005 Historical Aerial Photographs provided by Environmental Data Resources, Inc., 10/7/09

California Department of Oil, Gas, and Geothermal Resources (DOGGR), Wildcat Map #W3-10, County of Santa Clara, http://www.consrv.ca.gov/DOG/maps/Pages/d1_index_map1.aspx, accessed on May 19, 2010

EDR Radius Map with GeoCheck, Environmental Data Resources, Inc., dated October 6, 2009

EPA Map of Radon Zones, U.S. EPA, 1993

Flood Insurance Rate Map, Federal Emergency Management Agency, Index Map Number 06071C8607H, panel 8607 of 9400, map revised August 28, 2008

GeoTracker, State Water Resource Control Board, accessed May 5, 2010

Sanborn Fire Insurance Maps, provided by EDR, via The Sanborn Library, LLC, searched on October 6, 2009

Site Visit, conducted on May 4, 2010

USGS Historical Topographic Quadrangles, *Southern CA Sheet 1, Cucamonga, Ontario and Vicinity, Ontario, California*, Quadrangles, dated 1901 through 1973

USGS Topographic Quadrangle, *Ontario, California* Quadrangle, dated 1981

ATTACHMENTS

ATTACHMENT A
EDR Search

Upland Specific Plan
NA
Upland, CA 91786

Inquiry Number: 2607331.2s
October 06, 2009

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

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Milford, CT 06461
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NA
UPLAND, CA 91786

COORDINATES

Latitude (North):	34.096900 - 34° 5' 48.8''
Longitude (West):	117.646700 - 117° 38' 48.1''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	440344.7
UTM Y (Meters):	3772894.0
Elevation:	1232 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34117-A6 ONTARIO, CA
Most Recent Revision:	1981

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2005
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Transporters, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

SLIC ---------- Statewide SLIC Cases
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT	Waste Management Unit Database
SWRCY	Recycler Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL	Clandestine Drug Labs
HIST Cal-Sites	Historical Calsites Database
SCH	School Property Evaluation Program
Toxic Pits	Toxic Pits Cleanup Act Sites
CDL	Clandestine Drug Labs
US HIST CDL	National Clandestine Laboratory Register

Local Land Records

LIENS 2	CERCLA Lien Information
LUCIS	Land Use Control Information System
LIENS	Environmental Liens Listing
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing

Other Ascertainable Records

DOT OPS	Incident and Accident Data
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
CA BOND EXP. PLAN	Bond Expenditure Plan

CA WDS - Waste Discharge System
NPDES - NPDES Permits Listing
Cortese - "Cortese" Hazardous Waste & Substances Sites List
HAZNET - Facility and Manifest Data
EMI - Emissions Inventory Data
INDIAN RESERV - Indian Reservations
SCRD DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing
PCB TRANSFORMER - PCB Transformer Registration Database

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants - EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 06/30/2009 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN MMOULDINGS	***1111 EAST 8TH STREET***	***E 1/4 - 1/2 (0.383 mi.)***	***Y93***	***108***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 11/12/2008 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXONMOBIL OIL CORPORATION NO	204 N EUCLID AVE	0 - 1/8 (0.000 mi.)	A9	13

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 11/12/2008 has revealed that there are 7 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
IDEAL CLEANERS	***300 E ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***F18***	***23***
NOVOTNY AUTOMATIC TRANSMISSION	***259 E ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***H29***	***34***
UPLAND ELEMENTARY SCHOOL	***601 N 5TH AVE***	***N 0 - 1/8 (0.083 mi.)***	***75***	***84***
SAN ANTONIO COMMUNITY HOSPITAL	***999 SAN BERNARDINO RD***	***ENE 1/8 - 1/4 (0.207 mi.)***	***80***	***88***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN ANTONIO WEST END OPERATING	***172 N FIRST AVE***	***0 - 1/8 (0.000 mi.)***	***52***	***57***
UPLAND LEMON COMPANY	***392 E A ST***	***0 - 1/8 (0.000 mi.)***	***Q60***	***67***
RICHARDSON AUTO BODY INC	***114 N EIGHTH AVE***	***E 0 - 1/8 (0.073 mi.)***	***T73***	***79***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 08/27/2009 has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN MOLDINGS, INC.	***1111 EAST 8TH STREET***	***E 1/4 - 1/2 (0.383 mi.)***	***Y94***	***112***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 08/27/2009 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEDEUM Status: Refer: 1248 Local Agency	1075 WEST 9TH STREET	W 1/2 - 1 (0.758 mi.)	100	120

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN MOLDINGS, INC. Status: Refer: Other Agency	***1111 EAST 8TH STREET***	***E 1/4 - 1/2 (0.383 mi.)***	***Y94***	***112***
UPLAND THRALL HALL USAR Status: * De-listed	1284 E. SEVENTH STREET	ESE 1/2 - 1 (0.541 mi.)	99	118

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 07/07/2009 has revealed that there are 18 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION	***204 EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***A3***	***7***
UPLAND GAS UP	***177 ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***C5***	***9***
MOBIL STATION Status: Completed - Case Closed	204 N EUCLID AVE	0 - 1/8 (0.000 mi.)	A8	12
UNOCAL #5142	***502 EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***G23***	***29***
UPLAND GAS UP Status: Completed - Case Closed	177 E ARROW HWY	0 - 1/8 (0.000 mi.)	I28	33
TERRY'S SHELL	***183 FOOTHILL BLVD***	***N 1/4 - 1/2 (0.340 mi.)***	***W89***	***102***
CHEVRON #9-3078	***188 FOOTHILL BLVD***	***N 1/4 - 1/2 (0.340 mi.)***	***W90***	***104***
GOODYEAR TIRE CENTER	***913 FOOTHILL BLVD***	***N 1/4 - 1/2 (0.378 mi.)***	***91***	***105***
CHEVRON #9-3078 Status: Completed - Case Closed	188 E FOOTHILL BLVD	NNE 1/4 - 1/2 (0.380 mi.)	X92	107
TERRY'S SHELL Status: Completed - Case Closed	183 E FOOTHILL BLVD	NNE 1/4 - 1/2 (0.385 mi.)	X95	115

Lower Elevation	Address	Direction / Distance	Map ID	Page
G & M OIL SS #22	***159 EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***L40***	***45***
ARCO Status: Completed - Case Closed	193 S EUCLID AVE	0 - 1/8 (0.000 mi.)	M42	47
G & M OIL SS #22 Status: Completed - Case Closed	159 S EUCLID AVE	0 - 1/8 (0.000 mi.)	L47	51
SCHEU PRODUCTS	***297 STOWELL***	***0 - 1/8 (0.000 mi.)***	***K48***	***52***
PATRIOT GAS	***720 9TH ST***	***0 - 1/8 (0.000 mi.)***	***R64***	***72***
PATRIOT GAS Status: Completed - Case Closed	720 E 9TH ST	E 0 - 1/8 (0.018 mi.)	R68	75
PACTRA COATINGS INCORPORATED	***420 SOUTH 11TH AVENUE***	***SE 1/4 - 1/2 (0.388 mi.)***	***Z96***	***115***
PACTRA COATINGS Status: Completed - Case Closed	420 S 11TH AVE	SE 1/4 - 1/2 (0.388 mi.)	Z97	118

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 07/07/2009 has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL SS #11-D85	204 N EUCLID AVE	0 - 1/8 (0.000 mi.)	A12	16
UPLAND GAS-UP #2602	177 E ARROW HWY	0 - 1/8 (0.000 mi.)	I25	31
SAN ANTONIO COMMUNITY HOSPITAL	***999 SAN BERNARDINO RD***	***ENE 1/8 - 1/4 (0.207 mi.)***	***80***	***88***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EUCLID ARCO	***193 S EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***M43***	***48***
G & M OIL #22	159 S EUCLID AVE	0 - 1/8 (0.000 mi.)	L45	49

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCE-UPLAND SUBSTATION	***86 STOWEL ST***	***0 - 1/8 (0.000 mi.)***	***33***	***38***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

EXECUTIVE SUMMARY

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 15 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
POLICE DEPARTMENT	***177 E D ST***	***0 - 1/8 (0.000 mi.)***	***B7***	***11***
MOBIL OIL	***204 N EUCLID***	***0 - 1/8 (0.000 mi.)***	***A13***	***16***
US POSTAL SERVICE	***333 E ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***E17***	***22***
UNOCAL 76 STN #5606	***506 N EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***G21***	***26***
UPLAND GAS-UP	***177 E ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***I26***	***31***
SAN ANTONIO COMMUNITY HOSPITAL	***999 SAN BERNARDINO RD***	***ENE 1/8 - 1/4 (0.207 mi.)***	***80***	***88***

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA VERNE COOPERATIVE CITRUS AS	***138 S 2ND AVE***	***0 - 1/8 (0.000 mi.)***	***35***	***40***
RUGG LUMBER	***120 S EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***J36***	***42***
G&M OIL #22	***159 S EUCLID***	***0 - 1/8 (0.000 mi.)***	***L46***	***50***
SAN ANTONIO WEST END OPERATING	***139 N EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***O50***	***55***
SCHEU MANUFACTURING CO.	***395 W STOWELL ST***	***0 - 1/8 (0.000 mi.)***	***59***	***66***
ANTIMITE	***142 N 006TH AVE***	***0 - 1/8 (0.000 mi.)***	***62***	***71***
LINDLEY WHOLESALE	***109 N CAMPUS***	***E 0 - 1/8 (0.004 mi.)***	***67***	***74***
S M C	***905 E 008TH ST***	***E 0 - 1/8 (0.073 mi.)***	***74***	***82***
R. G. WHEATLEY & COMPANY, INC.	***153 N 010TH AVE***	***E 1/8 - 1/4 (0.165 mi.)***	***79***	***87***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 16 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
POLICE DEPARTMENT	177 D ST	0 - 1/8 (0.000 mi.)	B4	9
FIRE DEPT. STATION #1	***475 N 2ND AVE***	***0 - 1/8 (0.000 mi.)***	***C6***	***10***
STEVE BERG #14-015	***204 N EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***A15***	***20***
U.S. POST OFFICE	333 E ARROW HWY	0 - 1/8 (0.000 mi.)	E20	26
DRYSDALE'S UNION 76	502 N EUCLID AVE	0 - 1/8 (0.000 mi.)	G22	28
UPLAND GAS-UP	177 E ARROW HWY	0 - 1/8 (0.000 mi.)	I31	37

Lower Elevation	Address	Direction / Distance	Map ID	Page
W. F. RUGG LUMBER COMPANY	120 S EUCLID AVE	0 - 1/8 (0.000 mi.)	J39	44
G&M OIL #22	159 S EUCLID AVE	0 - 1/8 (0.000 mi.)	L44	48
SCHEU PRODUCTS	***297 STOWELL***	***0 - 1/8 (0.000 mi.)***	***K48***	***52***
SAN ANTONIO WATER COMPANY	139 N EUCLID AVE	0 - 1/8 (0.000 mi.)	O51	56
UPLAND LEMON GROWERS	392 A ST	0 - 1/8 (0.000 mi.)	Q57	65
ANTIMITE-UPLAND BRANCH	***142 N 6TH AVE***	***0 - 1/8 (0.000 mi.)***	***N61***	***69***
RICHARDSON WELDING SERVICE	***114 N 8TH AVE***	***E 0 - 1/8 (0.073 mi.)***	***T70***	***76***
LA MUNYON CONTRACTORS, INC.	905 E 8TH ST	E 1/8 - 1/4 (0.145 mi.)	U77	85
LA MUNYON CONTRACTORS, INC	905 E 8TH ST	E 1/8 - 1/4 (0.145 mi.)	U78	86
R. G. WHEATLEY & COMPANY, INC.	153 N 10TH AVE	E 1/8 - 1/4 (0.245 mi.)	V84	99

EXECUTIVE SUMMARY

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 15 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
POLICE DEPARTMENT	*177 E D ST*	*0 - 1/8 (0.000 mi.)*	*B7*	*11*
MOBIL OIL	*204 N EUCLID*	*0 - 1/8 (0.000 mi.)*	*A13*	*16*
US POSTAL SERVICE	*333 E ARROW HWY*	*0 - 1/8 (0.000 mi.)*	*E17*	*22*
UNOCAL 76 STN #5606	*506 N EUCLID AVE*	*0 - 1/8 (0.000 mi.)*	*G21*	*26*
UPLAND GAS-UP	*177 E ARROW HWY*	*0 - 1/8 (0.000 mi.)*	*I26*	*31*
SAN ANTONIO COMMUNITY HOSPITAL	*999 SAN BERNARDINO RD*	*ENE 1/8 - 1/4 (0.207 mi.)*	*80*	*88*

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA VERNE COOPERATIVE CITRUS AS	*138 S 2ND AVE*	*0 - 1/8 (0.000 mi.)*	*35*	*40*
RUGG LUMBER	*120 S EUCLID AVE*	*0 - 1/8 (0.000 mi.)*	*J36*	*42*
G&M OIL #22	*159 S EUCLID*	*0 - 1/8 (0.000 mi.)*	*L46*	*50*
SAN ANTONIO WEST END OPERATING	*139 N EUCLID AVE*	*0 - 1/8 (0.000 mi.)*	*O50*	*55*
SCHEU MANUFACTURING CO.	*395 W STOWELL ST*	*0 - 1/8 (0.000 mi.)*	*59*	*66*
ANTIMITE	*142 N 006TH AVE*	*0 - 1/8 (0.000 mi.)*	*62*	*71*
LINDLEY WHOLESALE	*109 N CAMPUS*	*E 0 - 1/8 (0.004 mi.)*	*67*	*74*
S M C	*905 E 008TH ST*	*E 0 - 1/8 (0.073 mi.)*	*74*	*82*
R. G. WHEATLEY & COMPANY, INC.	*153 N 010TH AVE*	*E 1/8 - 1/4 (0.165 mi.)*	*79*	*87*

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 11/12/2008 has revealed that there is 1 RCRA-NonGen site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
B AND D CONSTRUCTION	*145 N 10TH AVE*	*E 1/8 - 1/4 (0.245 mi.)*	*V85*	*100*

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 9 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION	*204 EUCLID AVE*	*0 - 1/8 (0.000 mi.)*	*A3*	*7*
UPLAND GAS UP	*177 ARROW HWY*	*0 - 1/8 (0.000 mi.)*	*C5*	*9*
UNOCAL #5142	*502 EUCLID AVE*	*0 - 1/8 (0.000 mi.)*	*G23*	*29*
TERRY'S SHELL	*183 FOOTHILL BLVD*	*N 1/4 - 1/2 (0.340 mi.)*	*W89*	*102*

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON #9-3078	***188 FOOTHILL BLVD***	***N 1/4 - 1/2 (0.340 mi.)***	***W90***	***104***
GOODYEAR TIRE CENTER	***913 FOOTHILL BLVD***	***N 1/4 - 1/2 (0.378 mi.)***	***91***	***105***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHEU PRODUCTS	***297 STOWELL***	***0 - 1/8 (0.000 mi.)***	***K48***	***52***
PATRIOT GAS	***720 9TH ST***	***0 - 1/8 (0.000 mi.)***	***R64***	***72***
PACTRA COATINGS INCORPORATED	***420 SOUTH 11TH AVENUE***	***SE 1/4 - 1/2 (0.388 mi.)***	***Z96***	***115***

Notify 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATION	183 WEST FOOTHILL	NNW 1/4 - 1/2 (0.399 mi.)	98	118

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 07/21/2009 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOM SON CLEANERS	***181 N 2ND AVE***	***0 - 1/8 (0.000 mi.)***	***P55***	***60***

WIP: Well Investigation Program case in the San Gabriel and San Fernando Valley area.

A review of the WIP list, as provided by EDR, and dated 07/03/2009 has revealed that there is 1 WIP site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ANTIMITE	***142 N 006TH AVE***	***0 - 1/8 (0.000 mi.)***	***62***	***71***
Facility Status: Historical				

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 06/29/2009 has revealed that there are 33 San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SPRINT-UPLAND	345 N 1ST ST	0 - 1/8 (0.000 mi.)	1	7
GRAVES AUTOMOTIVE SUPPLY	296 N 5TH AVE	0 - 1/8 (0.000 mi.)	2	7
FIRE DEPT. STATION #1	***475 N 2ND AVE***	***0 - 1/8 (0.000 mi.)***	***C6***	***10***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UPLAND 76	204 N EUCLID AVE	0 - 1/8 (0.000 mi.)	A14	19
INLAND COMMERCIAL FUELING INC	177 E ARROW HWY	0 - 1/8 (0.000 mi.)	I27	32
NOVOTNY AUTOMATIC TRANSMISSION	***259 E ARROW HWY***	***0 - 1/8 (0.000 mi.)***	***H29***	***34***
BEE'Z AUTO CARE	231 E ARROW HWY	0 - 1/8 (0.000 mi.)	H30	37
SAN ANTONIO COMMUNITY HOSPITAL	***999 SAN BERNARDINO RD***	***ENE 1/8 - 1/4 (0.207 mi.)***	***80***	***88***
UPLAND JR HI SCHOOL	444 11TH ST	NNE 1/8 - 1/4 (0.224 mi.)	82	98

Lower Elevation	Address	Direction / Distance	Map ID	Page
BOB LEROUGE AUTO REPAIR	***530 E 9TH ST***	***0 - 1/8 (0.000 mi.)***	***10***	***15***
SCE-UPLAND SUBSTATION	***86 STOWEL ST***	***0 - 1/8 (0.000 mi.)***	***33***	***38***
OLD RANCHERS CANNING CO INC	***167 S SULTANA AV***	***0 - 1/8 (0.000 mi.)***	***34***	***39***
SCHEU MANUFACTURING CO INCORPO	***297 E. STOWELL ST.***	***0 - 1/8 (0.000 mi.)***	***K37***	***43***
KNIGHT SAFE MFG	297 E STOWELL ST	0 - 1/8 (0.000 mi.)	K38	44
G & M OIL SS #22	***159 EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***L40***	***45***
SAWC MAINTENANCE FACILITY	172 S 1ST AVE	0 - 1/8 (0.000 mi.)	41	47
EUCLID ARCO	***193 S EUCLID AVE***	***0 - 1/8 (0.000 mi.)***	***M43***	***48***
PLANT # 13	159 N 6TH AVE	0 - 1/8 (0.000 mi.)	N49	55
TOM-SON CLEANERS	181 N 2ND AVE	0 - 1/8 (0.000 mi.)	P54	59
ANTIMITE	***142 N 6TH AVE***	***0 - 1/8 (0.000 mi.)***	***N56***	***64***
ATI WINDOWS	401 A ST	0 - 1/8 (0.000 mi.)	Q58	66
ANTIMITE ASSOCIATES INC	100 N 6TH AVE	0 - 1/8 (0.000 mi.)	63	72
M & S SCREW PRODUCTS, INC	143 N CAMPUS AVE	E 0 - 1/8 (0.003 mi.)	S65	73
M + M WELDING	131 N CAMPUS AVE	E 0 - 1/8 (0.003 mi.)	S66	74
GLOBAL OIL	***720 E 9TH ST***	***E 0 - 1/8 (0.018 mi.)***	***R69***	***75***
DIMIC SHEET METAL INC	***145 N 8TH AVE***	***E 0 - 1/8 (0.073 mi.)***	***T71***	***77***
RICHARDSON AUTO BODY INC	114 N 8TH AVE	E 0 - 1/8 (0.073 mi.)	T72	79
ZAPCO ENGINEERING	107 N 9TH AVE	E 1/8 - 1/4 (0.142 mi.)	76	85
MR. T'S TOWING	997 E 8TH ST	E 1/8 - 1/4 (0.214 mi.)	81	98
B & D EQUIPMENT RENTAL	145 N 10TH AVE	E 1/8 - 1/4 (0.245 mi.)	V83	99
GUTIERREZ AUTO REPAIR	1006 E 9TH ST	E 1/8 - 1/4 (0.248 mi.)	86	101
VERIZON WIRELESS	250 E 7TH ST	S 1/8 - 1/4 (0.248 mi.)	87	102
MILLION SMILES DENTAL OFFICE	300 E 7TH STE 2H	S 1/8 - 1/4 (0.248 mi.)	88	102

EDR PROPRIETARY RECORDS

EDR Proprietary Records

EDR Historical Auto Stations: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

A review of the EDR Historical Auto Stations list, as provided by EDR, has revealed that there are 5 EDR Historical Auto Stations sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MONROE J E	61 E ARROW HIGHWAY	0 - 1/8 (0.000 mi.)	16	22
HALL C W	256 E ARROW HIGHWAY	0 - 1/8 (0.000 mi.)	H24	30

Lower Elevation	Address	Direction / Distance	Map ID	Page
UPLAND MOTOR SERVICE	310 E 9TH	0 - 1/8 (0.000 mi.)	D11	16

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
UPLAND MOTOR CO	310 E 9TH ST	0 - 1/8 (0.000 mi.)	D32	38
REINHOLD LISLE W CO	422 E 9TH	0 - 1/8 (0.000 mi.)	53	59

EDR Historical Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

A review of the EDR Historical Cleaners list, as provided by EDR, has revealed that there is 1 EDR Historical Cleaners site within approximately 0.25 miles of the target property.

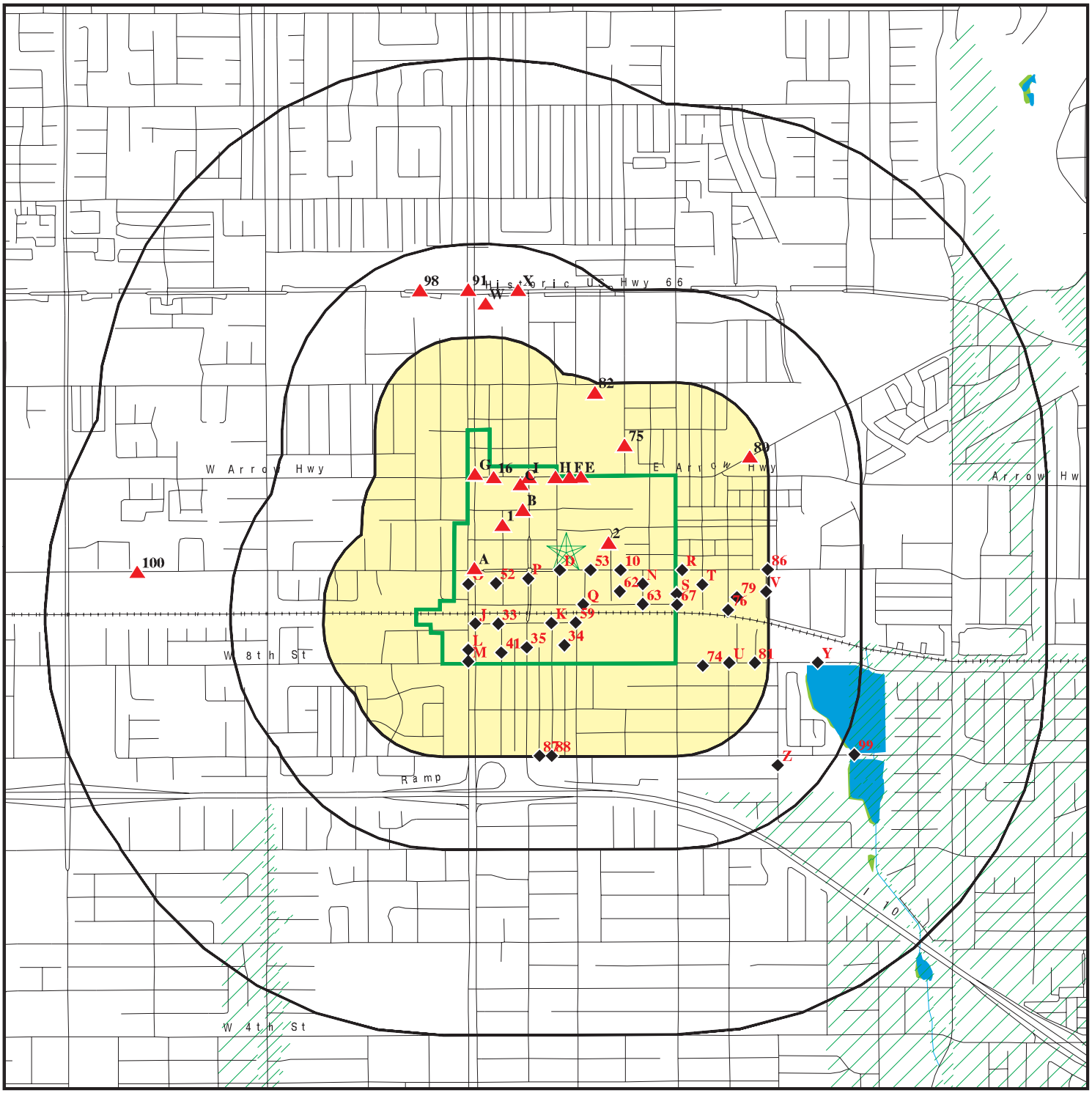
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RASH W M	300 E ARROW HIGHWAY	0 - 1/8 (0.000 mi.)	F19	26

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
ARCO	LUST, HIST CORTESE
UPLAND INTERCEPTOR RELIEF SEWER PH	NPDES
EARL BENNETT TEXACO SER.	CA FID UST, SWEEPS UST
GREAT WESTERN BANK	SWEEPS UST
LA VERNE CORPORATION	SWEEPS UST
UNOCAL #5142	LUST
LAIDLAW TRANSIT INC.	LUST
LANDFILL,UPLAND-INERT-2430 ARR	WMUDS/SWAT
CITY OF UPLAND/REDEVELOPMENT	HAZNET
UPLAND MANOR INC	HAZNET
A B C CONSTRUCTION SPECIALTIES	San Bern. Co. Permit
ARROW AUTO BODY	San Bern. Co. Permit
CORVETTE COLORS	San Bern. Co. Permit
CORITAS PALLETS	San Bern. Co. Permit
AT&T CORP - CAK810	San Bern. Co. Permit
PIERRE'S AUTO CLINIC	San Bern. Co. Permit
ABANDONED USTS	San Bern. Co. Permit
ATSF RIGHT-OF-WAY	SLIC
ATSF RIGHT-OF-WAY	SLIC
UPLAND CITY, FIRE DEPT # 1	EMI

OVERVIEW MAP - 2607331.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Upland Specific Plan ADDRESS: NA Upland CA 91786 LAT/LONG: 34.0969 / 117.6467	CLIENT: RBF Consulting CONTACT: Kristen Bogue INQUIRY #: 2607331.2s DATE: October 06, 2009 1:30 pm

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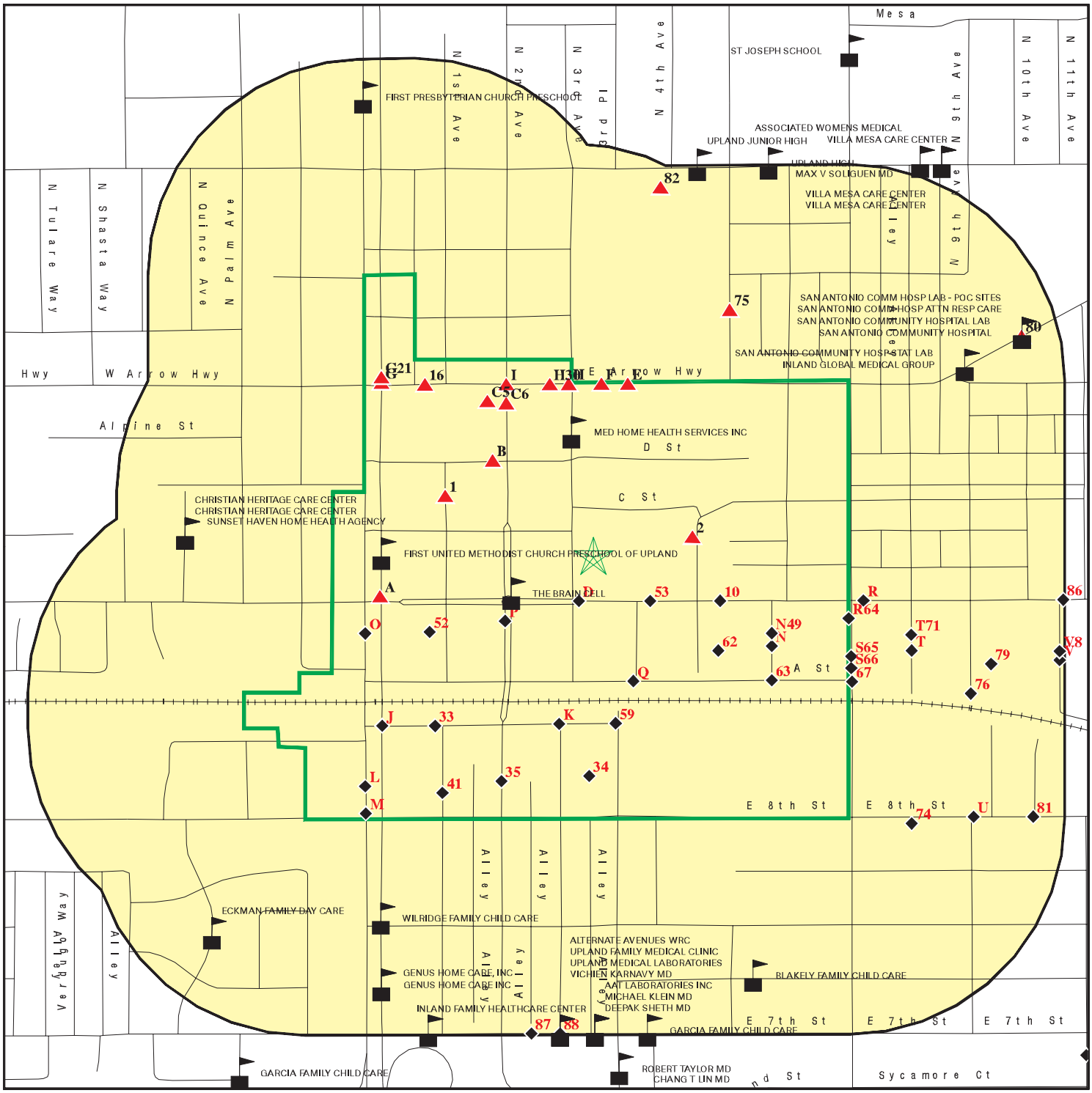
DETAIL MAP - 2607331.2s



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Upland Specific Plan	CLIENT: RBF Consulting
ADDRESS: NA	CONTACT: Kristen Bogue
Upland CA 91786	INQUIRY #: 2607331.2s
LAT/LONG: 34.0969 / 117.6467	DATE: October 06, 2009 1:32 pm

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	1	NR	NR	1
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	1	0	NR	NR	NR	1
RCRA-SQG		0.250	6	1	NR	NR	NR	7
RCRA-CESQG		0.250	0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE		1.000	0	0	1	0	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR		1.000	0	0	1	2	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	11	0	7	NR	NR	18
SLIC		0.500	0	0	0	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST		0.250	4	1	NR	NR	NR	5
AST		0.250	1	0	NR	NR	NR	1
INDIAN UST		0.250	0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP		0.500	0	0	0	NR	NR	0
INDIAN VCP		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
HAULERS		TP	NR	NR	NR	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
HIST Cal-Sites		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST		0.250	13	2	NR	NR	NR	15
HIST UST		0.250	13	3	NR	NR	NR	16
SWEEPS UST		0.250	13	2	NR	NR	NR	15
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
LIENS		TP	NR	NR	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
CHMIRS		TP	NR	NR	NR	NR	NR	0
LDS		TP	NR	NR	NR	NR	NR	0
MCS		TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN		1.000	0	0	0	0	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
NPDES		TP	NR	NR	NR	NR	NR	0
Cortese		0.500	0	0	0	NR	NR	0
HIST CORTESE		0.500	5	0	4	NR	NR	9
Notify 65		1.000	0	0	1	0	NR	1
DRYCLEANERS		0.250	1	0	NR	NR	NR	1
WIP		0.250	1	0	NR	NR	NR	1
San Bern. Co. Permit		0.250	25	8	NR	NR	NR	33
HAZNET		TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	1.000	0	0	0	0	NR	0
EDR Historical Auto Stations	0.250	5	0	NR	NR	NR	5
EDR Historical Cleaners	0.250	1	0	NR	NR	NR	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **SPRINT-UPLAND** **San Bern. Co. Permit** **S106911106**
345 N 1ST ST **N/A**
< 1/8 **UPLAND, CA 91768**
1 ft.

Relative: San Bern. Co. Permit:
Higher Region: SAN BERNARDINO
Facility ID: FA0006360
Owner: SPRINT/NEXTEL OF CALIFORNIA
Actual: Permit Number: PT0006845
1242 ft. Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 9/30/2002 12:00:00AM

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2 **GRAVES AUTOMOTIVE SUPPLY** **San Bern. Co. Permit** **S104766629**
296 N 5TH AVE **N/A**
< 1/8 **ONTARIO, CA 91786**
1 ft.

Relative: San Bern. Co. Permit:
Higher Region: SAN BERNARDINO
Facility ID: FA0003551
Owner: DINGLE, WILLIAM T.
Actual: Permit Number: PT0001387
1234 ft. Permit Category: SPECIAL HANDLER
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0003551
Owner: DINGLE, WILLIAM T.
Permit Number: PT0001388
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

A3 **MOBIL STATION** **LUST** **S103943765**
204 EUCLID AVE **HIST CORTESE** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 7 in cluster A

Relative: LUST REG 8:
Higher Region: 8
County: San Bernardino
Actual: Regional Board: Santa Ana Region
1233 ft. Facility Status: Case Closed
Case Number: 083602050T
Local Case Num: 92012
Case Type: Soil only
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street: 9TH
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure

MOBIL STATION (Continued) **S103943765**

How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100250
How Stopped Date:	3/8/1988
Enter Date:	6/23/1992
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	3/8/1988
Enforcement Date:	Not reported
Close Date:	6/30/1992
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	6/23/1992
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.096132
Longitude:	-117.6508517
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CORTESE:

Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083602050T

B4 **POLICE DEPARTMENT** **HIST UST** **U001570700**
177 D ST **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster B

Relative:
Higher

Actual:
1246 ft.

HIST UST:

Region:	STATE
Facility ID:	00000012218
Facility Type:	Other
Other Type:	POLICE STATION
Total Tanks:	0002
Contact Name:	COY ESTES POLICE CHIEF
Telephone:	7149467624
Owner Name:	CITY OF UPLAND
Owner Address:	460 N. EUCLID AVENUE
Owner City,St,Zip:	UPLAND, CA 91786
Tank Num:	001
Container Num:	TANK 3
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	G905660
Year Installed:	1976
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	1/4 inches
Leak Detection:	None

C5 **UPLAND GAS UP** **LUST** **S103286402**
177 ARROW HWY **HIST CORTESE** **N/A**
< 1/8 **UPLAND, CA 91730**
1 ft.

Site 1 of 2 in cluster C

Relative:
Higher

Actual:
1255 ft.

LUST REG 8:

Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083603122T
Local Case Num:	98002
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	02ND
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported

UPLAND GAS UP (Continued) **S103286402**

Global ID:	T0607100466
How Stopped Date:	Not reported
Enter Date:	2/11/1998
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	12/10/1997
Enforcement Date:	Not reported
Close Date:	2/5/1999
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	2/11/1998
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0998529
Longitude:	-117.6487797
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CORTESE:

Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083603122T

C6 **FIRE DEPT. STATION #1** **HIST UST** **U001570672**
475 N 2ND AVE **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster C

Relative: Higher

Actual: 1254 ft.

HIST UST:

Region:	STATE
Facility ID:	00000012217
Facility Type:	Other
Other Type:	FIRE STATION

FIRE DEPT. STATION #1 (Continued) **U001570672**

Total Tanks: 0002
Contact Name: DONALD JUSTIS FIRE CHIEF
Telephone: 7149854718
Owner Name: CITY OF UPLAND
Owner Address: 460 N. EUCLID AVENUE
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: TANK2
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: TANK 1
Year Installed: Not reported
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0002098
Owner: CITY OF UPLAND
Permit Number: PT0007403
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

B7 **POLICE DEPARTMENT** **CA FID UST S101629901**
177 E D ST **SWEEPS UST N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster B

Relative: Higher

Actual: 1246 ft.

CA FID UST:
Facility ID: 36000570
Regulated By: UTNKA
Regulated ID: 00012218
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported

POLICE DEPARTMENT (Continued) **S101629901**

Status: Active

SWEEPS UST:
Status: A
Comp Number: 12218
Number: 4
Board Of Equalization: 44-020377
Ref Date: 07-07-88
Act Date: 07-07-88
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: TANK 3
Swrcb Tank Id: 36-000-012218-000001
Actv Date: 07-07-88
Capacity: 1000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: A
Comp Number: 12218
Number: 4
Board Of Equalization: 44-020377
Ref Date: 07-07-88
Act Date: 07-07-88
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: G905660
Swrcb Tank Id: 36-000-012218-000002
Actv Date: 07-07-88
Capacity: 12000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

A8 **MOBIL STATION** **LUST** **S109285211**
204 N EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 7 in cluster A

Relative: Higher

Actual: 1232 ft.

LUST:
Region: STATE
Global Id: T0607100250
Latitude: 34.096132
Longitude: -117.6508517
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1992-06-30 00:00:00
Lead Agency: SAN BERNARDINO COUNTY LOP
Case Worker: Not reported
Local Agency: SAN BERNARDINO COUNTY LOP
RB Case Number: 083602050T
LOC Case Number: 92012
File Location: Local Agency

MOBIL STATION (Continued) **S109285211**

Potential Media Affect: Soil
Potential Contaminats of Concern: Gasoline
Site History: Not reported

A9 **EXXONMOBIL OIL CORPORATION NO 11165** **RCRA-LQG** **1007200172**
204 N EUCLID AVE **CAL000056156**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 7 in cluster A

Relative: Higher

Actual: 1232 ft.

RCRA-LQG:
Date form received by agency: 03/07/2004
Facility name: EXXONMOBIL OIL CORPORATION NO 11165
Facility address: 204 N EUCLID AVE
UPLAND, CA 917866037
EPA ID: CAL000056156
Mailing address: 12265 WEST BAYAUD AVE
LAKEWOOD, CO 80228
Contact: JOHN HOOVER
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (800) 253-8054
Contact email: Not reported
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: EXXONMOBIL OIL CORP.
Owner/operator address: 3225 GALLOWS RD
FAIRFAX, VA 22937
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/15/2003
Owner/Op end date: Not reported

Owner/operator name: EXXONMOBIL OIL CORP.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator

EXXONMOBIL OIL CORPORATION NO 11165 (Continued) **1007200172**

Owner/Op start date: 07/15/2003
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Pesticides
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Thermostats
Accumulated waste on-site: No
Generated waste on-site: No

Waste type: Batteries
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Lamps
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Pesticides
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Thermostats
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Historical Generators:
Date form received by agency: 02/28/2002

EXXONMOBIL OIL CORPORATION NO 11165 (Continued) **1007200172**

Facility name: EXXONMOBIL OIL CORPORATION NO 11165
Site name: EXXON MOBIL OIL CORP
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

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10 **BOB LEROUGE AUTO REPAIR** **HAZNET** **S102042436**
530 E 9TH ST **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Relative: Lower

Actual: 1224 ft.

HAZNET:
Gepaid: CAL000195164
Contact: BOB LEROUGE
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 530 E 9TH ST
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Tons: .6255
Facility County: San Bernardino

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0001519
Owner: LEROUGE, ROBERT W.
Permit Number: PT0004547
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0001519
Owner: LEROUGE, ROBERT W.
Permit Number: PT0004546
Permit Category: SPECIAL HANDLER
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

D11 **UPLAND MOTOR SERVICE** **EDR Historical Auto Stations** **1009115741**
310 E 9TH **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Site 1 of 2 in cluster D

Relative: EDR Historical Auto Stations:
Lower
Name: UPLAND MOTOR SERVICE
Year: 1934
Actual: Type: GASOLINE AND OIL SERVICE STATIONS
1225 ft.

Name: UPLAND MOTOR SERVICE
Year: 1938
Type: GASOLINE AND OIL SERVICE STATIONS

A12 **MOBIL OIL SS #11-D85** **UST** **U003940724**
204 N EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 4 of 7 in cluster A

Relative: UST:
Higher
Global ID: 14731
Latitude: 34.09628
Actual: Longitude: -117.65097
1232 ft.

A13 **MOBIL OIL** **HAZNET** **S101591017**
204 N EUCLID **CA FID UST** **N/A**
< 1/8 **UPLAND, CA 91786** **SWEEPS UST**
1 ft.

Site 5 of 7 in cluster A

Relative: HAZNET:
Higher
Gepaid: CAL000141810
Contact: Not reported
Actual: Telephone: 0000000000
1232 ft. Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 204 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917866037
Gen County: San Bernardino
TSD EPA ID: CAD050099696
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: .4170
Facility County: San Bernardino

Gepaid: CAL000076594
Contact: CHITSAZ MICHAEL
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 204 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAD093459485
TSD County: Fresno

MOBIL OIL (Continued) **S101591017**

Waste Category: Unspecified solvent mixture Waste
Disposal Method: Not reported
Tons: .0166
Facility County: San Bernardino

Gepaid: CAL000076594
Contact: CHITSAZ MICHAEL
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 204 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT000613927
TSD County: San Bernardino
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Transfer Station
Tons: .1167
Facility County: San Bernardino

CA FID UST:
Facility ID: 36000787
Regulated By: UTNKA
Regulated ID: 00039188
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 204 N EUCLID
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 39188
Number: 9
Board Of Equalization: 44-020969
Ref Date: 07-28-92
Act Date: 07-28-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 666
Swrcb Tank Id: 36-000-039188-000001
Actv Date: 07-07-88
Capacity: 280
Tank Use: OIL
Stg: W
Content: WASTE OIL
Number Of Tanks: 4

MOBIL OIL (Continued) **S101591017**

Status:	A
Comp Number:	39188
Number:	9
Board Of Equalization:	44-020969
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	667
Swrcb Tank Id:	36-000-039188-000002
Actv Date:	07-07-88
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	39188
Number:	9
Board Of Equalization:	44-020969
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	668
Swrcb Tank Id:	36-000-039188-000003
Actv Date:	07-07-88
Capacity:	8000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	39188
Number:	9
Board Of Equalization:	44-020969
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	669
Swrcb Tank Id:	36-000-039188-000004
Actv Date:	07-01-85
Capacity:	8000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

A14
< 1/8
1 ft.

Relative: Higher

Actual: 1232 ft.

UPLAND 76
204 N EUCLID AVE
UPLAND, CA 91786

Site 6 of 7 in cluster A

San Bern. Co. Permit **S105698395**
N/A

San Bern. Co. Permit:

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0011724
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: INACTIVE
Expiration Date: 7/31/2004 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0002507
Permit Category: SPECIAL GENERATOR(B)
Facility Status: INACTIVE
Expiration Date: 7/31/2003 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0011721
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0011723
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0002508
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004769
Owner: PREMIER UPLAND LLC
Permit Number: PT0011722
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

A15 **STEVE BERG #14-015** **CHMIRS** **U001570711**
204 N EUCLID AVE **HIST UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 7 of 7 in cluster A

Relative: CHMIRS:
Higher

OES Incident Number:	03-1602	
OES notification:	3/24/200307:12:46 PM	
Actual: OES Date:	Not reported	
1232 ft. OES Time:	Not reported	
Incident Date:	Not reported	
Date Completed:	**Not reported**	
Property Use:	Not reported	
Agency Id Number:	Not reported	
Agency Incident Number:	Not reported	
Time Notified:	Not reported	
Time Completed:	Not reported	
Surrounding Area:	Not reported	
Estimated Temperature:	Not reported	
Property Management:	Not reported	
Special Studies 1:	Not reported	
Special Studies 2:	Not reported	
Special Studies 3:	Not reported	
Special Studies 4:	Not reported	
Special Studies 5:	Not reported	
Special Studies 6:	Not reported	
More Than Two Substances Involved?:		Not reported
Resp Agncy Personel # Of Decontaminated:		Not reported
Responding Agency Personel # Of Injuries:		Not reported
Responding Agency Personel # Of Fatalities:		Not reported
Others Number Of Decontaminated:		Not reported
Others Number Of Injuries:		Not reported
Others Number Of Fatalities:		Not reported
Vehicle Make/year:	Not reported	
Vehicle License Number:	Not reported	
Vehicle State:	Not reported	
Vehicle Id Number:	Not reported	
CA/DOT/PUC/ICC Number:	Not reported	
Company Name:	Not reported	
Reporting Officer Name/ID:	Not reported	
Report Date:	Not reported	
Comments:	Not reported	
Facility Telephone:	Not reported	
Waterway Involved:	No	
Waterway:	Not reported	
Spill Site:	Not reported	
Cleanup By:	Contractor	
Containment:	Not reported	
What Happened:	Not reported	
Type:	Not reported	
Measure:	Not reported	
Other:	Not reported	
Date/Time:	Not reported	
Year:	2003	
Agency:	Veeder Root	
Incident Date:	3/24/200312:00:00 AM	
Admin Agency:	San Bernardino County Health Department	
Amount:	Not reported	

STEVE BERG #14-015 (Continued) **U001570711**

Contained:	Yes
Site Type:	Service Station
E Date:	Not reported
Substance:	PRPH
Quantity Released:	Not reported
BBLS:	0
Cups:	0
CUFT:	0
Gallons:	0.000000
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	0
Description:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	Initial site investigation results from analytical data came back positive.

HIST UST:

Region:	STATE
Facility ID:	00000039188
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0004
Contact Name:	Not reported
Telephone:	7149853372
Owner Name:	MOBIL OIL CORPORATION
Owner Address:	612 SOUTH FLOWER STREET
Owner City,St,Zip:	LOS ANGELES, CA 90017
Tank Num:	001
Container Num:	0666
Year Installed:	1959
Tank Capacity:	00000280
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Tank Construction:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	0667
Year Installed:	1959
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	0668

STEVE BERG #14-015 (Continued) **U001570711**

Year Installed: 1959
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 0669
Year Installed: 1959
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

---

16 **MONROE J E** **EDR Historical Auto Stations** **1009112808**
61 E ARROW HIGHWAY **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Relative: Higher

Actual: 1260 ft.

EDR Historical Auto Stations:
Name: MONROE J E
Year: 1934
Type: AUTOMOBILE REPAIRING

Name: MONROE J E
Year: 1938
Type: AUTOMOBILE REPAIRING

E17 **US POSTAL SERVICE** **CA FID UST** **S101591829**
333 E ARROW HWY **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster E

Relative: Higher

Actual: 1257 ft.

CA FID UST:
Facility ID: 36009247
Regulated By: UTNKA
Regulated ID: 00065485
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 333 E ARROW HWY
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

US POSTAL SERVICE (Continued) **S101591829**

SWEEPS UST:

Status:	A
Comp Number:	65485
Number:	9
Board Of Equalization:	44-010358
Ref Date:	07-07-88
Act Date:	07-07-88
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	35
Swrcb Tank Id:	36-000-065485-000001
Actv Date:	07-07-88
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	1

F18 **IDEAL CLEANERS** **RCRA-SQG 1000147635**
300 E ARROW HWY **FINDS CAD981615008**
< 1/8 **UPLAND, CA 91786** **EMI**
1 ft.

Site 1 of 2 in cluster F

Relative: Higher

Actual: 1257 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	IDEAL CLEANERS
Facility address:	300 E ARROW HWY UPLAND, CA 91786
EPA ID:	CAD981615008
Contact:	ENVIRONMENTAL MANAGER
Contact address:	300 E ARROW HWY UPLAND, CA 91786
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	ANTHONY J GARCIA
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED

IDEAL CLEANERS (Continued) **1000147635**

NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 01/23/1987
Facility name: IDEAL CLEANERS
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002724650

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

EMI:
Year: 1987
County Code: 36
Air Basin: SC
Facility ID: 36168
Air District Name: SC
SIC Code: 7216
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported

IDEAL CLEANERS (Continued) **1000147635**

Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	36168
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	36
Air Basin:	SC
Facility ID:	36168
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	36168
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

IDEAL CLEANERS (Continued) **1000147635**

Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

F19 **RASH W M** **EDR Historical Cleaners** **1009210535**
300 E ARROW HIGHWAY **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Site 2 of 2 in cluster F

Relative: Higher

Actual: 1257 ft.

EDR Historical Cleaners:

Name:	RASH W M
Year:	1934
Type:	CLOTHES PRESSERS AND CLEANERS
Name:	RASH W M
Year:	1938
Type:	CLOTHES PRESSERS AND CLEANERS

E20 **U.S. POST OFFICE** **HIST UST** **U001570720**
333 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster E

Relative: Higher

Actual: 1257 ft.

HIST UST:

Region:	STATE
Facility ID:	00000065485
Facility Type:	Other
Other Type:	POST OFFICE
Total Tanks:	0001
Contact Name:	DAVE JORDAN
Telephone:	7149812824
Owner Name:	U.S. POSTAL SERVICE
Owner Address:	333 E. ARROW HWY.
Owner City,St,Zip:	UPLAND, CA 91786
Tank Num:	001
Container Num:	35
Year Installed:	1973
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Stock Inventor

G21 **UNOCAL 76 STN #5606** **CA FID UST** **S101590996**
506 N EUCLID AVE **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 3 in cluster G

Relative: Higher

Actual: 1262 ft.

CA FID UST:

Facility ID:	36000532
Regulated By:	UTNKA
Regulated ID:	00055205
Cortese Code:	Not reported

UNOCAL 76 STN #5606 (Continued) **S101590996**

SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	506 N EUCLID AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	ONTARIO 91764
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

Facility ID:	36000532
Regulated By:	UTNKA
Regulated ID:	00059702
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	506 N EUCLID AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	59702
Number:	9
Board Of Equalization:	44-021294
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	4
Swrcb Tank Id:	36-000-059702-000001
Actv Date:	07-01-85
Capacity:	7500
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	3

Status:	A
Comp Number:	59702
Number:	9
Board Of Equalization:	44-021294
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88

UNOCAL 76 STN #5606 (Continued) **S101590996**

Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 36-000-059702-000002
Actv Date: 07-07-88
Capacity: 1
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 59702
Number: 9
Board Of Equalization: 44-021294
Ref Date: 07-28-92
Act Date: 07-28-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 36-000-059702-000003
Actv Date: 07-07-88
Capacity: 1
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

G22 **DRYSDALE'S UNION 76** **HIST UST** **1000378806**
502 N EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 3 in cluster G

Relative: Higher

Actual: 1261 ft.

HIST UST:
Region: STATE
Facility ID: 00000059702
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0004
Contact Name: CHARLES M. DRYSDALE
Telephone: 7149829005
Owner Name: CHARLES M. DRYSDALE
Owner Address: 502 N. EUCLID AVE.
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00007500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000

DRYSDALE'S UNION 76 (Continued) **1000378806**

Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

G23 **UNOCAL #5142** **LUST S104759053**
502 EUCLID AVE **HIST CORTESE N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 3 in cluster G

Relative: Higher

Actual: 1261 ft.

LUST REG 8:
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083601102T
Local Case Num: 87065
Case Type: Soil only
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: ARROW
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: UNK
Leak Source: Tank
Global ID: T0607100123
How Stopped Date: 11/15/1988
Enter Date: 12/15/1988
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 11/15/1988
Enforcement Date: Not reported
Close Date: 4/7/1989
Workplan: Not reported
Pollution Char: 12/15/1988
Remed Plan: Not reported

UNOCAL #5142 (Continued) **S104759053**

Remed Action:	2/28/1989
Monitoring:	Not reported
Enter Date:	12/15/1988
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0997819
Longitude:	-117.6508697
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	Not reported
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

CORTESE:

Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083601102T

H24 **HALL C W** **EDR Historical Auto Stations** **1009113650**
256 E ARROW HIGHWAY **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Site 1 of 3 in cluster H

Relative: Higher

Actual: 1257 ft.

EDR Historical Auto Stations:

Name:	HALL C W
Year:	1934
Type:	GASOLINE AND OIL SERVICE STATIONS
Name:	HALL C W
Year:	1938
Type:	GASOLINE AND OIL SERVICE STATIONS

I25 **UPLAND GAS-UP #2602** **UST** **U003942812**
177 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 5 in cluster I

Relative:
Higher

Actual:
1259 ft.

UST:
Global ID: 14740
Latitude: 34.09978
Longitude: -117.64832

I26 **UPLAND GAS-UP** **CA FID UST** **S101619085**
177 E ARROW HWY **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 5 in cluster I

Relative:
Higher

Actual:
1259 ft.

CA FID UST:
Facility ID: 36006311
Regulated By: UTNKA
Regulated ID: 00009386
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 1401 E ARROW HWY
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 9386
Number: 9
Board Of Equalization: 44-020192
Ref Date: 07-28-92
Act Date: 07-28-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 36-000-009386-000001
Actv Date: 07-07-88
Capacity: 4000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 4

Status: A
Comp Number: 9386
Number: 9
Board Of Equalization: 44-020192
Ref Date: 07-28-92

UPLAND GAS-UP (Continued) **S101619085**

Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	36-000-009386-000002
Actv Date:	07-07-88
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	9386
Number:	9
Board Of Equalization:	44-020192
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	3
Swrcb Tank Id:	36-000-009386-000003
Actv Date:	07-07-88
Capacity:	4000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	9386
Number:	9
Board Of Equalization:	44-020192
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	4
Swrcb Tank Id:	36-000-009386-000004
Actv Date:	07-07-88
Capacity:	550
Tank Use:	OIL
Stg:	W
Content:	WASTE OIL
Number Of Tanks:	Not reported

I27 **INLAND COMMERCIAL FUELING INC** **San Bern. Co. Permit** **S105698384**
177 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 5 in cluster I

Relative:
Higher

Actual:
1259 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0006953
Owner:	INLAND COMMERCIAL FUELING,INC
Permit Number:	PT0011748
Permit Category:	UST OWNERSHIP/OPERATING PERMIT (PER UST)

INLAND COMMERCIAL FUELING INC (Continued) **S105698384**

Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0006953
Owner: INLAND COMMERCIAL FUELING,INC
Permit Number: PT0011750
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0006953
Owner: INLAND COMMERCIAL FUELING,INC
Permit Number: PT0021548
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0006953
Owner: INLAND COMMERCIAL FUELING,INC
Permit Number: PT0011749
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0006953
Owner: INLAND COMMERCIAL FUELING,INC
Permit Number: PT0002529
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

I28 **UPLAND GAS UP** **LUST** **S109285164**
177 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91730**
1 ft.

Site 4 of 5 in cluster I

Relative: Higher

Actual: 1259 ft.

LUST:
Region: STATE
Global Id: T0607100466
Latitude: 34.0998529
Longitude: -117.6487797
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1999-02-05 00:00:00
Lead Agency: SAN BERNARDINO COUNTY LOP
Case Worker: Not reported
Local Agency: SAN BERNARDINO COUNTY LOP
RB Case Number: 083603122T
LOC Case Number: 98002
File Location: Local Agency
Potential Media Affect: Soil
Potential Contaminats of Concern: Gasoline
Site History: Not reported

H29 **NOVOTNY AUTOMATIC TRANSMISSIONS** **RCRA-SQG** **1000343039**
259 E ARROW HWY **FINDS** **CAD103105078**
< 1/8 **UPLAND, CA 91786** **HAZNET**
1 ft. **San Bern. Co. Permit**

Site 2 of 3 in cluster H

Relative:
Higher

Actual:
1257 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	NOVOTNY AUTOMATIC TRANSMISSIONS
Facility address:	259 E ARROW HWY UPLAND, CA 91786
EPA ID:	CAD103105078
Mailing address:	E ARROW HWY UPLAND, CA 91786
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARYCREST INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown

NOVOTNY AUTOMATIC TRANSMISSIONS (Continued) **1000343039**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110002666589

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD103105078
Contact:	MARY CREST INC
Telephone:	9099826117
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	259 E ARROW HWY
Mailing City,St,Zip:	UPLAND, CA 917860000
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	0.4587
Facility County:	San Bernardino

Gepaid:	CAD103105078
Contact:	MARY CREST INC
Telephone:	9099826117
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	259 E ARROW HWY
Mailing City,St,Zip:	UPLAND, CA 917860000
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	.3753
Facility County:	San Bernardino

Gepaid:	CAD103105078
Contact:	JEFFREY ROBERTS

NOVOTNY AUTOMATIC TRANSMISSIONS (Continued) **1000343039**

Telephone: 9099826117
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 259 E ARROW HWY
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified oil-containing waste
Disposal Method: Not reported
Tons: 0.52
Facility County: Not reported

Gepaid: CAD103105078
Contact: MARY CREST INC
Telephone: 9099826117
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 259 E ARROW HWY
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Tons: .3336
Facility County: San Bernardino

Gepaid: CAD103105078
Contact: MARY CREST INC
Telephone: 9099826117
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 259 E ARROW HWY
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Tons: .4587
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0005010
Owner: MARYCREST, INC.
Permit Number: PT0004307
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005010

NOVOTNY AUTOMATIC TRANSMISSIONS (Continued) **1000343039**

Owner: MARYCREST, INC.
Permit Number: PT0004308
Permit Category: GENERATOR - 0-10 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

H30 **BEE'Z AUTO CARE** **San Bern. Co. Permit** **S105698387**
231 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 3 in cluster H

Relative:
Higher

Actual:
1258 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0001411
Owner: JUNG, JAMES HYUK
Permit Number: PT0005517
Permit Category: LIMITED QUANTITY GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 9/30/2009 12:00:00AM

I31 **UPLAND GAS-UP** **HIST UST** **U001570726**
177 E ARROW HWY **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 5 of 5 in cluster I

Relative:
Higher

Actual:
1259 ft.

HIST UST:
Region: STATE
Facility ID: 00000009386
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0004
Contact Name: Not reported
Telephone: 7149828954
Owner Name: R.F. WHITE CO., INC.
Owner Address: 1401 E. ARROW HWY.
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

UPLAND GAS-UP (Continued) **U001570726**

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

D32 **UPLAND MOTOR CO** **EDR Historical Auto Stations** **1009113855**
310 E 9TH ST **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Site 2 of 2 in cluster D

Relative:
Lower

Actual:
1225 ft.

EDR Historical Auto Stations:
Name: UPLAND MOTOR CO
Year: 1934
Type: AUTOMOBILE REPAIRING

Name: UPLAND MOTOR CO
Year: 1938
Type: AUTOMOBILE REPAIRING

---

33 **SCE-UPLAND SUBSTATION** **AST** **S105047571**
86 STOWEL ST **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Relative:
Lower

Actual:
1211 ft.

AST:
Owner: SOUTHERN CALIFORNIA EDISON
Total Gallons: 17,723
Certified Unified Program Agencies: San Bernardino

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0000286
Owner: SOUTHERN CALIFORNIA EDISON
Permit Number: PT0000386
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 2/28/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0000286
Owner: SOUTHERN CALIFORNIA EDISON
Permit Number: PT0020838

SCE-UPLAND SUBSTATION (Continued) **S105047571**

Permit Category: ABOVEGROUND PETROLEUM STORAGE (AST) (SPCC)
Facility Status: ACTIVE
Expiration Date: 2/28/2010 12:00:00AM

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34 **OLD RANCHERS CANNING CO INC** **EMI** **S104768645**
167 S SULTANA AV **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA**
1 ft.

Relative: Lower

Actual: 1202 ft.

EMI:

Year:	1987
County Code:	36
Air Basin:	SC
Facility ID:	14407
Air District Name:	SC
SIC Code:	2011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	1
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	14407
Air District Name:	SC
SIC Code:	2011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	14407
Air District Name:	SC
SIC Code:	2011
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0

OLD RANCHERS CANNING CO INC (Continued) **S104768645**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0005044
Owner: OLD RANCHERS CANNING CO
Permit Number: PT0008623
Permit Category: LIMITED QUANTITY GENERATOR(B)
Facility Status: INACTIVE
Expiration Date: 8/31/2007 12:00:00AM

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35 **LA VERNE COOPERATIVE CITRUS AS** **CA FID UST S101591083**
138 S 2ND AVE **SWEEPS UST N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Relative: Lower

Actual: 1201 ft.

CA FID UST:
Facility ID: 36001282
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 138 S 2ND AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 36001282
Regulated By: UTNKA
Regulated ID: 00037385
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149851936
Mail To: Not reported
Mailing Address: 138 S 002ND AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 37385

LA VERNE COOPERATIVE CITRUS AS (Continued) **S101591083**

Number:	9
Board Of Equalization:	Not reported
Ref Date:	03-27-89
Act Date:	03-27-89
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	36-000-037385-000001
Actv Date:	07-01-85
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	P
Content:	Not reported
Number Of Tanks:	3

Status:	A
Comp Number:	37385
Number:	9
Board Of Equalization:	Not reported
Ref Date:	03-27-89
Act Date:	03-27-89
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	36-000-037385-000002
Actv Date:	07-01-85
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	P
Content:	Not reported
Number Of Tanks:	Not reported

Status:	A
Comp Number:	37385
Number:	9
Board Of Equalization:	Not reported
Ref Date:	03-27-89
Act Date:	03-27-89
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	3
Swrcb Tank Id:	36-000-037385-000003
Actv Date:	07-01-85
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	P
Content:	Not reported
Number Of Tanks:	Not reported

J36 **RUGG LUMBER** **CA FID UST** **S101591087**
120 S EUCLID AVE **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster J

Relative:
Lower

Actual:
1213 ft.

CA FID UST:

Facility ID:	36001304
Regulated By:	UTNKA
Regulated ID:	00018664
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7149820983
Mail To:	Not reported
Mailing Address:	120 S EUCLID AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	Not reported
Comp Number:	18664
Number:	Not reported
Board Of Equalization:	Not reported
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-018664-000001
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	LEADED
Number Of Tanks:	1

Status:	A
Comp Number:	18664
Number:	2
Board Of Equalization:	Not reported
Ref Date:	12-04-89
Act Date:	12-04-89
Created Date:	02-29-88
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	Not reported
Actv Date:	Not reported
Capacity:	Not reported
Tank Use:	Not reported
Stg:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

K37 **SCHEU MANUFACTURING CO INCORPORATED** **FINDS** **1004442972**
297 E. STOWELL ST. **EMI** **N/A**
< 1/8 **UPLAND, CA 91786** **San Bern. Co. Permit**
1 ft.

Site 1 of 3 in cluster K

Relative: Lower

Actual: 1210 ft.

FINDS:

Registry ID: 110002143733

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

EMI:

Year:	1987
County Code:	36
Air Basin:	SC
Facility ID:	17371
Air District Name:	SC
SIC Code:	3444
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

SCHEU MANUFACTURING CO INCORPORATED (Continued) **1004442972**

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0006064
Owner: SCHEU MANUFACTURING CO
Permit Number: PT0002759
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 5/31/2006 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0006064
Owner: SCHEU MANUFACTURING CO
Permit Number: PT0002760
Permit Category: GENERATOR - 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 5/31/2006 12:00:00AM

K38 **KNIGHT SAFE MFG** **San Bern. Co. Permit** **S106911365**
297 E STOWELL ST **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 3 in cluster K

Relative:
Lower

Actual:
1210 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0009629
Owner: DOUBLECO, INC.
Permit Number: PT0016408
Permit Category: GENERATOR - 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 4/30/2006 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0009629
Owner: DOUBLECO, INC.
Permit Number: PT0016409
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status: INACTIVE
Expiration Date: 4/30/2006 12:00:00AM

J39 **W. F. RUGG LUMBER COMPANY** **HIST UST** **U001570734**
120 S EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster J

Relative:
Lower

Actual:
1213 ft.

HIST UST:
Region: STATE
Facility ID: 00000018664
Facility Type: Other
Other Type: LUMBER CO.
Total Tanks: 0001
Contact Name: Not reported
Telephone: 7149828857
Owner Name: W.F. RUGG LUMBER COMPANY
Owner Address: 120 S. EUCLID AVE

W. F. RUGG LUMBER COMPANY (Continued) **U001570734**

Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

L40 **G & M OIL SS #22** **LUST S103368210**
159 EUCLID AVE **San Bern. Co. Permit N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 5 in cluster L

Relative:
Lower

Actual:
1206 ft.

LUST REG 8:
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Preliminary site assessment workplan submitted
Case Number: 083602741T
Local Case Num: 95043
Case Type: Soil only
Substance: Gasoline
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Not reported
How Stopped: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Global ID: T0607100395
How Stopped Date: Not reported
Enter Date: 12/15/1995
Review Date: 8/4/1995
Prelim Assess: Not reported
Discover Date: 8/4/1995
Enforcement Date: Not reported
Close Date: 4/29/2004
Workplan: 1/1/1965
Pollution Char: 2/17/1999
Remed Plan: Not reported
Remed Action: 2/17/1999
Monitoring: Not reported
Enter Date: 12/15/1995
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 34.0927031
Longitude: -117.6516197
MTBE Date: Not reported

G & M OIL SS #22 (Continued) **S103368210**

Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class: *
Staff: VJJ
Staff Initials: CB5
Lead Agency: Local Agency
Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0003175
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0011358
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0011360
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0011357
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0011359
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

G & M OIL SS #22 (Continued) **S103368210**

Region: SAN BERNARDINO
Facility ID: FA0003376
Owner: G & M OIL COMPANY, INC.
Permit Number: PT0003176
Permit Category: LIMITED QUANTITY GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

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41 **SAWC MAINTENANCE FACILITY** **San Bern. Co. Permit** **S103369291**
172 S 1ST AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Relative:
Lower

Actual:
1201 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0005933
Owner: SAN ANTONIO WATER COMPANY
Permit Number: PT0007062
Permit Category: SPECIAL HANDLER
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005933
Owner: SAN ANTONIO WATER COMPANY
Permit Number: PT0007063
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

M42 **ARCO** **LUST** **S109285103**
193 S EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster M

Relative:
Lower

Actual:
1201 ft.

LUST:
Region: STATE
Global Id: T0607100512
Latitude: 34.0923031
Longitude: -117.6516197
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2001-04-10 00:00:00
Lead Agency: SAN BERNARDINO COUNTY LOP
Case Worker: Not reported
Local Agency: SAN BERNARDINO COUNTY LOP
RB Case Number: 083603284T
LOC Case Number: 98059
File Location: Local Agency
Potential Media Affect: Soil
Potential Contaminats of Concern: Gasoline
Site History: Not reported

M43 **EUCLID ARCO** **UST** **U003785201**
193 S EUCLID AVE **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster M

Relative:
Lower

Actual:
1201 ft.

UST:
Global ID: 15208
Latitude: 34.09268
Longitude: -117.65128

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0002945
Owner: HUSSAIN, FRED
Permit Number: PT0010123
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002945
Owner: HUSSAIN, FRED
Permit Number: PT0010122
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002945
Owner: HUSSAIN, FRED
Permit Number: PT0010124
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002945
Owner: HUSSAIN, FRED
Permit Number: PT0005033
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

L44 **G&M OIL #22** **HIST UST** **U001570676**
159 S EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 5 in cluster L

Relative:
Lower

Actual:
1206 ft.

HIST UST:
Region: STATE
Facility ID: 00000052519
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0004
Contact Name: R.T. OTJEN
Telephone: 7149602471
Owner Name: GEORGE A. PEARSON DBA G&M OIL

G&M OIL #22 (Continued) **U001570676**

Owner Address: 2120 MAIN STREET, SUITE 140
Owner City,St,Zip: HUNTINGTON BEACH, CA 92648

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

L45 **G & M OIL #22** **UST** **U003939834**
159 S EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 5 in cluster L

Relative: UST:
Lower Global ID: 14897
Latitude: 34.09303
Actual: Longitude: -117.65128
1206 ft.

L46 **G&M OIL #22** **CA FID UST** **S101619068**
159 S EUCLID **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 4 of 5 in cluster L

Relative:
Lower

Actual:
1206 ft.

CA FID UST:

Facility ID:	36004779
Regulated By:	UTNKA
Regulated ID:	00052519
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	2120 MAIN ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	52519
Number:	9
Board Of Equalization:	44-021173
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	36-000-052519-000001
Actv Date:	07-07-88
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	4

Status:	A
Comp Number:	52519
Number:	9
Board Of Equalization:	44-021173
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	36-000-052519-000002
Actv Date:	07-07-88
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

G&M OIL #22 (Continued) **S101619068**

Status:	A
Comp Number:	52519
Number:	9
Board Of Equalization:	44-021173
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	3
Swrcb Tank Id:	36-000-052519-000003
Actv Date:	07-07-88
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	A
Comp Number:	52519
Number:	9
Board Of Equalization:	44-021173
Ref Date:	07-28-92
Act Date:	07-28-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	4
Swrcb Tank Id:	36-000-052519-000004
Actv Date:	07-07-88
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

L47 **G & M OIL SS #22** **LUST** **S109285069**
159 S EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 5 of 5 in cluster L

Relative:
Lower

Actual:
1206 ft.

LUST:

Region:	STATE
Global Id:	T0607100395
Latitude:	34.0927031
Longitude:	-117.6516197
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2004-04-29 00:00:00
Lead Agency:	SAN BERNARDINO COUNTY LOP
Case Worker:	Not reported
Local Agency:	SAN BERNARDINO COUNTY LOP
RB Case Number:	083602741T
LOC Case Number:	95043
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminats of Concern:	Gasoline
Site History:	Not reported

K48 **SCHEU PRODUCTS** **HAZNET** **1000224465**
297 STOWELL **LUST** **N/A**
< 1/8 **UPLAND, CA 91786** **HIST UST**
1 ft. **HIST CORTESE**

Site 3 of 3 in cluster K

Relative:
Lower

Actual:
1210 ft.

HAZNET:

Gepaid:	CAD981454150
Contact:	SCHEU MANUFACTURING
Telephone:	7149828933
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 250
Mailing City,St,Zip:	UPLAND, CA 917850250
Gen County:	San Bernardino
TSD EPA ID:	CAD000088252
TSD County:	Los Angeles
Waste Category:	Paint sludge
Disposal Method:	Transfer Station
Tons:	.1000
Facility County:	San Bernardino

Gepaid:	CAD981454150
Contact:	SCHEU MANUFACTURING
Telephone:	7149828933
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 250
Mailing City,St,Zip:	UPLAND, CA 917850250
Gen County:	San Bernardino
TSD EPA ID:	CAD000088252
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	2.8000
Facility County:	San Bernardino

Gepaid:	CAD981454150
Contact:	SCHEU MANUFACTURING
Telephone:	7149828933
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 250
Mailing City,St,Zip:	UPLAND, CA 917850250
Gen County:	San Bernardino
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler
Tons:	6.2550
Facility County:	San Bernardino

Gepaid:	CAD981454150
Contact:	SCHEU MANUFACTURING
Telephone:	7149828933
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 250
Mailing City,St,Zip:	UPLAND, CA 917850250

SCHEU PRODUCTS (Continued) **1000224465**

Gen County: San Bernardino
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Recycler
Tons: 15.8460
Facility County: San Bernardino

Gepaid: CAD981454150
Contact: SCHEU MANUFACTURING
Telephone: 7149828933
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 250
Mailing City,St,Zip: UPLAND, CA 917850250
Gen County: San Bernardino
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Treatment, Tank
Tons: .6255
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
37 additional CA_HAZNET: record(s) in the EDR Site Report.

LUST REG 8:
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083602371T
Local Case Num: 93046
Case Type: Soil only
Substance: Diesel
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: Not reported
Enf Type: CLOS
Funding: Federal Funds
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: Structure Failure
Leak Source: Not reported
Global ID: T0607100306
How Stopped Date: 9/3/1993
Enter Date: 1/12/1994
Review Date: 9/3/1993
Prelim Assess: Not reported
Discover Date: 9/3/1993
Enforcement Date: Not reported
Close Date: 4/5/1994
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported

SCHEU PRODUCTS (Continued) **1000224465**

Enter Date: 1/12/1994
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 34.0941551
Longitude: -117.6474186
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 1
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: VJJ
Staff Initials: BM7
Lead Agency: Local Agency
Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST UST:
Region: STATE
Facility ID: 00000042711
Facility Type: Other
Other Type: HEATER MANUFACTURER
Total Tanks: 0002
Contact Name: Not reported
Telephone: 7149828933
Owner Name: SCHEU PRODUCTS CO., INC.
Owner Address: 297 EAST STOWELL STREET
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

SCHEU PRODUCTS (Continued) **1000224465**

CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083602371T

N49 **PLANT # 13** **San Bern. Co. Permit** **S102042468**
159 N 6TH AVE **N/A**
< 1/8 **UPLAND, CA 91784**
1 ft.

Site 1 of 3 in cluster N

Relative:
Lower

Actual:
1217 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0002105
Owner: CITY OF UPLAND
Permit Number: PT0006962
Permit Category: CALARP FACILITY PERMIT
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002105
Owner: CITY OF UPLAND
Permit Number: PT0015122
Permit Category: RISK MANAGEMENT PLAN - LEVEL II
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002105
Owner: CITY OF UPLAND
Permit Number: PT0015123
Permit Category: EPCRA FACILITY
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002105
Owner: CITY OF UPLAND
Permit Number: PT0006963
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

O50 **SAN ANTONIO WEST END OPERATING** **CA FID UST** **S101619082**
139 N EUCLID AVE **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster O

Relative:
Lower

Actual:
1227 ft.

CA FID UST:
Facility ID: 36001160
Regulated By: UTNKI
Regulated ID: 00040946
Cortese Code: Not reported

SAN ANTONIO WEST END OPERATING (Continued) **S101619082**

SIC Code:	Not reported
Facility Phone:	7149824107
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

SWEEPS UST:

Status:	Not reported
Comp Number:	40946
Number:	Not reported
Board Of Equalization:	Not reported
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-040946-000001
Actv Date:	Not reported
Capacity:	500
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	1

O51 **SAN ANTONIO WATER COMPANY** **HIST UST** **U001570710**
139 N EUCLID AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 2 in cluster O

Relative:
Lower

Actual:
1227 ft.

HIST UST:

Region:	STATE
Facility ID:	00000040946
Facility Type:	Other
Other Type:	WATER COMPANY
Total Tanks:	0001
Contact Name:	SCOTT WEILAND - FOREMAN
Telephone:	7149824107
Owner Name:	SAN ANTONIO WATER COMPANY
Owner Address:	139 N. EUCLID AVE.
Owner City,St,Zip:	UPLAND, CA 91786
Tank Num:	001
Container Num:	030852
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported

SAN ANTONIO WATER COMPANY (Continued) **U001570710**

Leak Detection: None

---

52 **SAN ANTONIO WEST END OPERATING** **RCRA-SQG** **1000686665**
172 N FIRST AVE **FINDS** **CAD983640152**
< 1/8 **UPLAND, CA 91786** **HAZNET**
1 ft.

Relative: Lower

Actual: 1225 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	SAN ANTONIO WEST END OPERATING
Facility address:	172 N FIRST AVE UPLAND, CA 91786
EPA ID:	CAD983640152
Mailing address:	N EUCLID AVE UPLAND, CA 91786
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SAN ANTONIO WEST END OPERATING
Owner/operator address:	139 N EUCLID AVE UPLAND, CA 91786
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 982-4107
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

SAN ANTONIO WEST END OPERATING (Continued) **1000686665**

Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 01/05/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002878930

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:
Gepaid: CAD983640152
Contact: SAN ANTONIO WATER COMPANY
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 139 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: .2293
Facility County: San Bernardino

Gepaid: CAD983640152
Contact: GENERAL MANAGER
Telephone: 9099824107
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 139 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: CAD028409019
TSD County: Los Angeles
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Transfer Station
Tons: 0.04
Facility County: Not reported

Gepaid: CAD983640152
Contact: GENERAL MANAGER

SAN ANTONIO WEST END OPERATING (Continued) **1000686665**

Telephone: 9099824107
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 139 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: Not reported
TSD County: 99
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Tons: 0.20
Facility County: Not reported

Gepaid: CAD983640152
Contact: GENERAL MANAGER
Telephone: 9099824107
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 139 N EUCLID AVE
Mailing City,St,Zip: UPLAND, CA 917860000
Gen County: San Bernardino
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: 0.22
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
-1 additional CA_HAZNET: record(s) in the EDR Site Report.

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53 **REINHOLD LISLE W CO** **EDR Historical Auto Stations** **1009114919**
422 E 9TH **N/A**
< 1/8 **UPLAND, CA**
1 ft.

EDR Historical Auto Stations:
Relative: Name: REINHOLD LISLE W CO
Lower Year: 1931
Type: AUTOMOBILE REPAIRING

Actual:
1224 ft.

P54 **TOM-SON CLEANERS** **San Bern. Co. Permit** **S104771155**
181 N 2ND AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 2 in cluster P

San Bern. Co. Permit:
Relative: Region: SAN BERNARDINO
Lower Facility ID: FA0006706
Owner: WHANG, CHARLES
Actual: Permit Number: PT0001338
1224 ft. Permit Category: LIMITED QUANTITY GENERATOR(B)
Facility Status: INACTIVE
Expiration Date: 8/31/2005 12:00:00AM

P55 **TOM SON CLEANERS** **HAZNET** **1000132012**
181 N 2ND AVE **DRYCLEANERS** **N/A**
< 1/8 **UPLAND, CA 91786** **EMI**
1 ft.

Site 2 of 2 in cluster P

Relative: Lower

Actual: 1224 ft.

HAZNET:

Gepaid:	CAD982049413
Contact:	JUNE WHANG/CHARLES WHANG
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	181 N 2ND AVE
Mailing City,St,Zip:	UPLAND, CA 917866019
Gen County:	San Bernardino
TSD EPA ID:	CAD981397417
TSD County:	Los Angeles
Waste Category:	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method:	Recycler
Tons:	0.997
Facility County:	San Bernardino

Gepaid:	CAD982049413
Contact:	JUNE WHANG/CHARLES WHANG
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	181 N 2ND AVE
Mailing City,St,Zip:	UPLAND, CA 917866019
Gen County:	San Bernardino
TSD EPA ID:	CAD981397417
TSD County:	Los Angeles
Waste Category:	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method:	Recycler
Tons:	1.1658
Facility County:	San Bernardino

Gepaid:	CAD982049413
Contact:	JUNE WHANG
Telephone:	9099821667
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	181 N 2ND AVE
Mailing City,St,Zip:	UPLAND, CA 917866019
Gen County:	San Bernardino
TSD EPA ID:	CAT000613893
TSD County:	San Bernardino
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Transfer Station
Tons:	0.32
Facility County:	San Bernardino

Gepaid:	CAD982049413
Contact:	JUNE WHANG
Telephone:	9099821667
Facility Addr2:	Not reported
Mailing Name:	Not reported

TOM SON CLEANERS (Continued) **1000132012**

Mailing Address: 181 N 2ND AVE
Mailing City,St,Zip: UPLAND, CA 917866019
Gen County: San Bernardino
TSD EPA ID: CAD008302903
TSD County: Los Angeles
Waste Category: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method: Not reported
Tons: Not reported
Facility County: Not reported

Gepaid: CAD982049413
Contact: JUNE WHANG/CHARLES WHANG
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE
Mailing City,St,Zip: UPLAND, CA 917866019
Gen County: San Bernardino
TSD EPA ID: CAD981397417
TSD County: Los Angeles
Waste Category: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method: Recycler
Tons: 1.2159
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
14 additional CA_HAZNET: record(s) in the EDR Site Report.

DRYCLEANERS:
EPA Id: CAD982049413
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7212
SIC Description: Garment Pressing, and Agents for Laundries and Drycleaners
Create Date: 10/20/2004 10:23:00 AM
Facility Active: No
Inactive Date: 6/30/2006
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 917866019
Region Code: 4
Owner Name: JUNE WHANG/CHARLES WHANG
Owner Address: 181 N 2ND AVE
Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: JUNE WHANG
Contact Address: 181 N 2ND AVE
Contact Address 2: Not reported
Contact Telephone: 9099821667

EPA Id: CAD982049413
NAICS Code: 81232

TOM SON CLEANERS (Continued) **1000132012**

NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7389
SIC Description: Business Services, NEC (apparel pressing service for the trade)
Create Date: 10/20/2004 10:23:00 AM
Facility Active: No
Inactive Date: 6/30/2006
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 917866019
Region Code: 4
Owner Name: JUNE WHANG/CHARLES WHANG
Owner Address: 181 N 2ND AVE
Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: JUNE WHANG
Contact Address: 181 N 2ND AVE
Contact Address 2: Not reported
Contact Telephone: 9099821667

EPA Id: CAD982049413
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7219
SIC Description: Laundry and Garment Services, NEC (except diaper service and clothing alteration and repair)
Create Date: 10/20/2004 10:23:00 AM
Facility Active: No
Inactive Date: 6/30/2006
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 917866019
Region Code: 4
Owner Name: JUNE WHANG/CHARLES WHANG
Owner Address: 181 N 2ND AVE
Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: JUNE WHANG
Contact Address: 181 N 2ND AVE
Contact Address 2: Not reported
Contact Telephone: 9099821667

EPA Id: CAD982049413
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7216
SIC Description: Drycleaning Plants, Except Rug Cleaning
Create Date: 10/20/2004 10:23:00 AM
Facility Active: No
Inactive Date: 6/30/2006
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE

TOM SON CLEANERS (Continued) **1000132012**

Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 917866019
Region Code: 4
Owner Name: JUNE WHANG/CHARLES WHANG
Owner Address: 181 N 2ND AVE
Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: JUNE WHANG
Contact Address: 181 N 2ND AVE
Contact Address 2: Not reported
Contact Telephone: 9099821667

EPA Id: CAD982049413
NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial
Create Date: 10/20/2004 10:23:00 AM
Facility Active: No
Inactive Date: 6/30/2006
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 181 N 2ND AVE
Mailing Address 2: Not reported
Mailing State: CA
Mailing Zip: 917866019
Region Code: 4
Owner Name: JUNE WHANG/CHARLES WHANG
Owner Address: 181 N 2ND AVE
Owner Address 2: Not reported
Owner Telephone: 0000000000
Contact Name: JUNE WHANG
Contact Address: 181 N 2ND AVE
Contact Address 2: Not reported
Contact Telephone: 9099821667

EMI:

Year: 1987
County Code: 36
Air Basin: SC
Facility ID: 48083
Air District Name: SC
SIC Code: 7216
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1990
County Code: 36

TOM SON CLEANERS (Continued) **1000132012**

Air Basin:	SC
Facility ID:	48083
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	48083
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

N56 **ANTIMITE** **HAZNET** **S105033221**
142 N 6TH AVE **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 3 in cluster N

Relative: Lower

Actual: 1216 ft.

HAZNET:

Gepaid:	CAC001269928
Contact:	ANTIMITE
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	142 N 6TH AVE
Mailing City,St,Zip:	UPLAND, CA 917860000
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	.2085
Facility County:	San Bernardino

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0000971

ANTIMITE (Continued) **S105033221**

Owner: ANTIMITE
Permit Number: PT0002492
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0000971
Owner: ANTIMITE
Permit Number: PT0002491
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Q57 **UPLAND LEMON GROWERS** **HIST UST** **U001570751**
392 A ST **N/A**
< 1/8 **UPLAND, CA 91789**
1 ft.

Site 1 of 3 in cluster Q

Relative: Lower

Actual: 1214 ft.

HIST UST:
Region: STATE
Facility ID: 00000007390
Facility Type: Other
Other Type: CITRUS PACKING HOUSE
Total Tanks: 0002
Contact Name: DON DAVIS
Telephone: 7149462814
Owner Name: FMC CORPORATION
Owner Address: 1540 LINDEN ST.
Owner City,St,Zip: RIVERSIDE, CA 92507

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 10 gauge
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 3/16 inches
Leak Detection: None

Q58 **ATI WINDOWS** **San Bern. Co. Permit** **S104763975**
401 A ST **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 2 of 3 in cluster Q

Relative: Lower

Actual: 1214 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0001188
Owner:	ATI WINDOWS
Permit Number:	PT0009746
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	9/30/2007 12:00:00AM

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59 **SCHEU MANUFACTURING CO.** **CA FID UST** **S101591779**
395 W STOWELL ST **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Relative: Lower

Actual: 1210 ft.

CA FID UST:

Facility ID:	36008988
Regulated By:	UTNKA
Regulated ID:	00042711
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	Not reported
Comp Number:	10438
Number:	Not reported
Board Of Equalization:	44-021019
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-010438-000001
Actv Date:	Not reported
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	DIESEL
Number Of Tanks:	3

Status:	Not reported
Comp Number:	10438

SCHEU MANUFACTURING CO. (Continued) **S101591779**

Number:	Not reported
Board Of Equalization:	44-021019
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-010438-000002
Actv Date:	Not reported
Capacity:	2000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	10438
Number:	Not reported
Board Of Equalization:	44-021019
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-010438-000003
Actv Date:	Not reported
Capacity:	250
Tank Use:	OIL
Stg:	WASTE
Content:	WASTE OIL
Number Of Tanks:	Not reported

Q60 **UPLAND LEMON COMPANY** **RCRA-SQG 1000151926**
392 E A ST **FINDS CAD982403743**
< 1/8 **UPLAND, CA 91785**
1 ft.

Site 3 of 3 in cluster Q

Relative: Lower

Actual: 1214 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	UPLAND LEMON COMPANY
Facility address:	392 E A ST UPLAND, CA 91785
EPA ID:	CAD982403743
Mailing address:	P O BOX 40 UPLAND, CA 91785
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

UPLAND LEMON COMPANY (Continued) **1000151926**

hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: BLUE GOOSE GROWERS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 02/16/1990
Facility name: UPLAND LEMON COMPANY
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002805279

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

UPLAND LEMON COMPANY (Continued) **1000151926**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

N61 **ANTIMITE-UPLAND BRANCH** **HAZNET** **U001570650**
142 N 6TH AVE **HIST UST** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 3 of 3 in cluster N

Relative: Lower

Actual: 1216 ft.

HAZNET:

Gepaid:	CAL000234350
Contact:	LYNN SCOTT MIS
Telephone:	9094835300
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 10
Mailing City,St,Zip:	ALTA LOMA, CA 917010000
Gen County:	San Bernardino
TSD EPA ID:	CAD099452708
TSD County:	San Bernardino
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.43
Facility County:	San Bernardino

Gepaid:	CAL000234350
Contact:	LYNN SCOTT MIS
Telephone:	9094835300
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 10
Mailing City,St,Zip:	ALTA LOMA, CA 917010000
Gen County:	San Bernardino
TSD EPA ID:	CAD099452708
TSD County:	San Bernardino
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler
Tons:	0.22
Facility County:	San Bernardino

Gepaid:	CAL000234350
Contact:	LYNN SCOTT MIS
Telephone:	9094835300
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 10
Mailing City,St,Zip:	ALTA LOMA, CA 917010000
Gen County:	San Bernardino
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Waste Category:	Waste oil and mixed oil
Disposal Method:	Not reported
Tons:	0.41
Facility County:	Not reported

Gepaid:	CAL000234350

ANTIMITE-UPLAND BRANCH (Continued) **U001570650**

Contact: LYNN SCOTT MIS
Telephone: 9094835300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 10
Mailing City,St,Zip: ALTA LOMA, CA 917010000
Gen County: San Bernardino
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: 0.41
Facility County: Not reported

Gepaid: CAL000234350
Contact: LYNN SCOTT MIS
Telephone: 9094835300
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 10
Mailing City,St,Zip: ALTA LOMA, CA 917010000
Gen County: San Bernardino
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.16
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST UST:
Region: STATE
Facility ID: 00000009916
Facility Type: Other
Other Type: PEST CONTROL
Total Tanks: 0001
Contact Name: RICK SWOPE
Telephone: 7149465810
Owner Name: ANTIMITE ASSOCIATES, INC.
Owner Address: 142 N. 6TH AVE
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: 1972
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

62
< 1/8
1 ft.

ANTIMITE
142 N 006TH AVE
UPLAND, CA 91786

CA FID UST **S101619052**
WIP **N/A**
SWEEPS UST

Relative:
Lower

Actual:
1217 ft.

CA FID UST:

Facility ID:	36008509
Regulated By:	UTNKA
Regulated ID:	00009916
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	142 N 006TH AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

WIP:

Region:	4
File Number:	108.0995
File Status:	**Historical**
Staff:	PAR
Facility Suite:	Not reported

SWEEPS UST:

Status:	A
Comp Number:	9916
Number:	9
Board Of Equalization:	44-020232
Ref Date:	06-30-88
Act Date:	06-30-88
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	36-000-009916-000001
Actv Date:	07-01-85
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	1

63 **ANTIMITE ASSOCIATES INC** **San Bern. Co. Permit** **S102042410**
100 N 6TH AVE **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

San Bern. Co. Permit:
Relative: Region: SAN BERNARDINO
Lower Facility ID: FA0000973
Owner: ANTIMITE ASSOCIATES INC
Actual: Permit Number: PT0007996
1211 ft. Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status: INACTIVE
Expiration Date: 5/31/2007 12:00:00AM

R64 **PATRIOT GAS** **LUST** **S104405182**
720 9TH ST **HIST CORTESE** **N/A**
< 1/8 **UPLAND, CA 91786**
1 ft.

Site 1 of 3 in cluster R

LUST REG 8:
Relative: Region: 8
Lower County: San Bernardino
Regional Board: Santa Ana Region
Actual: Facility Status: Preliminary site assessment workplan submitted
1217 ft. Case Number: 083603642T
Local Case Num: 99114
Case Type: Soil only
Substance: 8006619, MTB
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: CAMPUS
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: UNK
Leak Source: UNK
Global ID: T0607100631
How Stopped Date: 12/10/1998
Enter Date: 3/9/2000
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 12/10/1998
Enforcement Date: Not reported
Close Date: Not reported
Workplan: 9/9/1999
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: 3/9/2000
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 34.1026969
Longitude: -117.6414445

PATRIOT GAS (Continued) **S104405182**

MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: RS
Staff Initials: LH6
Lead Agency: Local Agency
Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: MUN
Priority: A2
Cleanup Fund Id: Not reported
Work Suspended: No
Summary: UNDER INVESTIGATION

CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083603642T

S65 **M & S SCREW PRODUCTS, INC** **San Bern. Co. Permit** **S102042583**
East **143 N CAMPUS AVE** **N/A**
< 1/8 **UPLAND, CA 91786**
0.003 mi.
18 ft. **Site 1 of 2 in cluster S**

Relative:
Lower

Actual:
1213 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0004527
Owner: REESE, MICHAEL D
Permit Number: PT0006562
Permit Category: SPECIAL HANDLER
Facility Status: ACTIVE
Expiration Date: 9/30/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004527
Owner: REESE, MICHAEL D
Permit Number: PT0006563
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 9/30/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004527
Owner: REESE, MICHAEL D
Permit Number: PT0018517
Permit Category: WASTE-GENERATING RECYCLER (ONSITE)
Facility Status: ACTIVE
Expiration Date: 9/30/2007 12:00:00AM

S66
East
< 1/8
0.003 mi.
18 ft.

M + M WELDING
131 N CAMPUS AVE
UPLAND, CA 91786

Site 2 of 2 in cluster S

San Bern. Co. Permit **S106910970**
N/A

Relative:
Lower

Actual:
1211 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0004529
Owner:	GREGORY SWAILES
Permit Number:	PT0004033
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	INACTIVE
Expiration Date:	11/30/2003 12:00:00AM

67
East
< 1/8
0.004 mi.
22 ft.

LINDLEY WHOLESALE
109 N CAMPUS
UPLAND, CA 91786

CA FID UST **S101591631**
SWEEPS UST **N/A**

Relative:
Lower

Actual:
1210 ft.

CA FID UST:

Facility ID:	36008541
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	109 N CAMPUS
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	11118
Number:	9
Board Of Equalization:	Not reported
Ref Date:	09-11-91
Act Date:	09-11-91
Created Date:	09-15-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-011118-000001
Actv Date:	09-15-88
Capacity:	1
Tank Use:	UNKNOWN
Stg:	P
Content:	UNKNOWN
Number Of Tanks:	1

R68 **PATRIOT GAS** **LUST** **S109285235**
East **720 E 9TH ST** **N/A**
< 1/8 **UPLAND, CA 91786**
0.018 mi.
93 ft. **Site 2 of 3 in cluster R**

Relative: LUST:
Lower

Region:	STATE
Global Id:	T0607100631
Actual: Latitude:	34.1026969
1219 ft. Longitude:	-117.6414445
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2005-06-20 00:00:00
Lead Agency:	SAN BERNARDINO COUNTY LOP
Case Worker:	Not reported
Local Agency:	SAN BERNARDINO COUNTY LOP
RB Case Number:	083603642T
LOC Case Number:	99114
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminats of Concern:	Gasoline, Fuel Oxygenates
Site History:	Not reported

R69 **GLOBAL OIL** **HAZNET** **S108747899**
East **720 E 9TH ST** **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
0.018 mi.
93 ft. **Site 3 of 3 in cluster R**

Relative: HAZNET:
Lower

Gepaid:	CAL000295707
Contact:	ALI MOURAD
Actual: Telephone:	5629037075
1219 ft. Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	12145 MORA DR STE 13
Mailing City,St,Zip:	SANTA FE SPRINGS, CA 90670
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Off-specification, aged, or surplus organics
Disposal Method:	Recycler
Tons:	0.2
Facility County:	San Bernardino

Gepaid:	CAL000295707
Contact:	ALI MOURAD
Telephone:	5629037075
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	12145 MORA DR STE 13
Mailing City,St,Zip:	SANTA FE SPRINGS, CA 90670
Gen County:	San Bernardino
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Waste Category:	Oil/water separation sludge
Disposal Method:	H039
Tons:	5.83
Facility County:	San Bernardino

GLOBAL OIL (Continued) **S108747899**

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0004666
Owner: SABCO UPLAND PETROLEUM INC
Permit Number: PT0003901
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004666
Owner: SABCO UPLAND PETROLEUM INC
Permit Number: PT0011065
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0004666
Owner: SABCO UPLAND PETROLEUM INC
Permit Number: PT0011064
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

T70 **RICHARDSON WELDING SERVICE** **HIST UST** **U001570707**
East **114 N 8TH AVE** **EMI** **N/A**
< 1/8 **UPLAND, CA 91786**
0.073 mi.
383 ft. **Site 1 of 4 in cluster T**

Relative:
Lower

Actual:
1213 ft.

HIST UST:
Region: STATE
Facility ID: 00000037362
Facility Type: Other
Other Type: WELDING SERVICE
Total Tanks: 0000
Contact Name: Not reported
Telephone: 7149827415
Owner Name: RICHARDSON WELDING SERVICE
Owner Address: 114 N. 8TH AVE.
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: 1979
Tank Capacity: 00001000
Tank Used for: Not reported
Type of Fuel: Not reported
Tank Construction: 1/4" inches
Leak Detection: None

EMI:
Year: 1987
County Code: 36
Air Basin: SC
Facility ID: 37531

RICHARDSON WELDING SERVICE (Continued) **U001570707**

Air District Name:	SC
SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	37531
Air District Name:	SC
SIC Code:	7538
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

T71 **DIMIC SHEET METAL INC** **HAZNET** **S102042483**
East **145 N 8TH AVE** **San Bern. Co. Permit** **N/A**
< 1/8 **UPLAND, CA 91786**
0.073 mi.
383 ft. **Site 2 of 4 in cluster T**

Relative:
Lower

Actual:
1215 ft.

HAZNET:

Gepaid:	CAD040518110
Contact:	MARIJA GOODALE
Telephone:	9099466767
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	145 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865402
Gen County:	San Bernardino
TSD EPA ID:	CAD097030993
TSD County:	San Bernardino
Waste Category:	Metal dust - machining waste and Alkaline solution (pH <UN-> 12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
Disposal Method:	Disposal, Other
Tons:	3.08
Facility County:	San Bernardino

Gepaid:	CAD040518110
Contact:	MARIJA GOODALE
Telephone:	9099466767

DIMIC SHEET METAL INC (Continued) **S102042483**

Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	145 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865402
Gen County:	San Bernardino
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	5.58
Facility County:	San Bernardino

Gepaid:	CAD040518110
Contact:	MARIJA GOODALE
Telephone:	9099466767
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	145 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865402
Gen County:	San Bernardino
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	2.29
Facility County:	Not reported

Gepaid:	CAD040518110
Contact:	MARIJA GOODALE
Telephone:	9099466767
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	145 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865402
Gen County:	San Bernardino
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	2.29
Facility County:	Not reported

Gepaid:	CAD040518110
Contact:	MARIJA GOODALE
Telephone:	9099466767
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	145 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865402
Gen County:	San Bernardino
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Waste Category:	Waste oil and mixed oil
Disposal Method:	H14
Tons:	0.41
Facility County:	San Bernardino

DIMIC SHEET METAL INC (Continued) **S102042483**

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0002742
Owner: DIMIC, MILE
Permit Number: PT0005479
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES (W/GEN PRMT)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0002742
Owner: DIMIC, MILE
Permit Number: PT0005480
Permit Category: GENERATOR - 11-25 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

T72 **RICHARDSON AUTO BODY INC** **San Bern. Co. Permit** **S100872180**
East **114 N 8TH AVE** **N/A**
< 1/8 **UPLAND, CA 91786**
0.073 mi.
383 ft. **Site 3 of 4 in cluster T**

Relative:
Lower

Actual:
1213 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0005706
Owner: ARTINIAN, VASKEN
Permit Number: PT0005477
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005706
Owner: ARTINIAN, VASKEN
Permit Number: PT0005478
Permit Category: GENERATOR - 0-10 EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 5/31/2010 12:00:00AM

T73 **RICHARDSON AUTO BODY INC** **RCRA-SQG** **1000239805**
East **114 N EIGHTH AVE** **FINDS** **CAD981684517**
< 1/8 **UPLAND, CA 91786** **HAZNET**
0.073 mi.
387 ft. **Site 4 of 4 in cluster T**

Relative:
Lower

Actual:
1213 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: RICHARDSON AUTO BODY INC
Facility address: 114 N EIGHTH AVE
UPLAND, CA 91786
EPA ID: CAD981684517
Mailing address: N EIGHTH AVE

RICHARDSON AUTO BODY INC (Continued) **1000239805**

UPLAND, CA 91786
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: RICHARDSON JOE B
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

RICHARDSON AUTO BODY INC (Continued) **1000239805**

FINDS:

Registry ID: 110002751718

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD981684517
Contact:	RICHARDSON AUTO BODY INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	114 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865401
Gen County:	San Bernardino
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler
Tons:	0.125
Facility County:	San Bernardino

Gepaid:	CAD981684517
Contact:	RICHARDSON AUTO BODY INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	114 N 8TH AVE
Mailing City,St,Zip:	UPLAND, CA 917865401
Gen County:	San Bernardino
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Recycler
Tons:	.3584
Facility County:	San Bernardino

Gepaid:	CAD981684517
Contact:	LOU ARRIETA
Telephone:	9099827415
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	114 N EIGHTH AVE
Mailing City,St,Zip:	UPLAND, CA 917860000
Gen County:	San Bernardino
TSD EPA ID:	CAD008252405
TSD County:	San Bernardino
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Recycler

RICHARDSON AUTO BODY INC (Continued) **1000239805**

Tons: 0.06
Facility County: San Bernardino

Gepaid: CAD981684517
Contact: RICHARDSON AUTO BODY INC
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 114 N 8TH AVE
Mailing City,St,Zip: UPLAND, CA 917865401
Gen County: San Bernardino
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Recycler
Tons: .0625
Facility County: San Bernardino

Gepaid: CAD981684517
Contact: RICHARDSON AUTO BODY INC
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 114 N 8TH AVE
Mailing City,St,Zip: UPLAND, CA 917865401
Gen County: San Bernardino
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Aqueous solution with 10% or more total organic residues
Disposal Method: Recycler
Tons: .2001
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
8 additional CA_HAZNET: record(s) in the EDR Site Report.

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74 **S M C** **CA FID UST** **S101591673**
East **905 E 008TH ST** **SWEEPS UST** **N/A**
< 1/8 **UPLAND, CA 91786**
0.073 mi.
388 ft.

Relative:
Lower

Actual:
1188 ft.

CA FID UST:
Facility ID: 36008612
Regulated By: UTNKA
Regulated ID: 00013360
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: PO BOX 1693
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported

S M C (Continued) **S101591673**

Comments: Not reported
Status: Active

SWEEPS UST:
Status: A
Comp Number: 13360
Number: 9
Board Of Equalization: 44-020444
Ref Date: 06-30-88
Act Date: 06-30-88
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: B-84832
Swrcb Tank Id: 36-000-013360-000001
Actv Date: 07-01-85
Capacity: 1000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: 3

Status: A
Comp Number: 13360
Number: 9
Board Of Equalization: 44-020444
Ref Date: 06-30-88
Act Date: 06-30-88
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 36-000-013360-000002
Actv Date: 07-01-85
Capacity: 1000
Tank Use: M.V. FUEL
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 13360
Number: 9
Board Of Equalization: 44-020444
Ref Date: 06-30-88
Act Date: 06-30-88
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 36-000-013360-000003
Actv Date: 07-01-85
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: Not reported
Number Of Tanks: Not reported

75
North
< 1/8
0.083 mi.
436 ft.

UPLAND ELEMENTARY SCHOOL
601 N 5TH AVE
UPLAND, CA 91786

RCRA-SQG **1004677840**
FINDS **CAR000102129**

Relative:
Higher

Actual:
1267 ft.

RCRA-SQG:

Date form received by agency:	08/02/2001
Facility name:	UPLAND ELEMENTARY SCHOOL
Facility address:	601 N 5TH AVE UPLAND, CA 91786
EPA ID:	CAR000102129
Mailing address:	1428 W 9TH ST UPLAND, CA 91786
Contact:	MIKE JACQUES
Contact address:	1428 W 9TH ST UPLAND, CA 91786
Contact country:	US
Contact telephone:	(909) 985-7311
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	UPLAND UNIFIED SCHOOL DISTRI
Owner/operator address:	390 N EUCLID AVE UPLAND, CA 91786
Owner/operator country:	Not reported
Owner/operator telephone:	(909) 985-1864
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

UPLAND ELEMENTARY SCHOOL (Continued) **1004677840**

Historical Generators:
Date form received by agency: 08/02/2001
Facility name: UPLAND ELEMENTARY SCHOOL
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110012189924

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

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76 **ZAPCO ENGINEERING** **San Bern. Co. Permit** **S104772583**
East **107 N 9TH AVE** **N/A**
1/8-1/4 **UPLAND, CA 91786**
0.142 mi.
748 ft.

Relative:
Lower

Actual:
1207 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0007400
Owner: ZAPATA, JORGE AND CARLOS
Permit Number: PT0008889
Permit Category: LIMITED QUANTITY GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 4/30/2010 12:00:00AM

U77 **LA MUNYON CONTRACTORS, INC.** **HIST UST** **U001570686**
East **905 E 8TH ST** **N/A**
1/8-1/4 **UPLAND, CA 91786**
0.145 mi.
764 ft. **Site 1 of 2 in cluster U**

Relative:
Lower

Actual:
1189 ft.

HIST UST:
Region: STATE
Facility ID: 00000067875
Facility Type: Other
Other Type: PAINTING CONTRACTOR
Total Tanks: 0001
Contact Name: Not reported
Telephone: 7149851105
Owner Name: LAMUNYON CONTRACTORS, INC.
Owner Address: 905 E. 8TH STREET
Owner City,St,Zip: UPLAND, CA 91786

LA MUNYON CONTRACTORS, INC. (Continued) **U001570686**

Tank Num: 001
Container Num: 004
Year Installed: Not reported
Tank Capacity: 00007000
Tank Used for: WASTE
Type of Fuel: 6U
Tank Construction: Unkown centimeters
Leak Detection: None

U78 **LA MUNYON CONTRACTORS, INC** **HIST UST** **U001570685**
East **905 E 8TH ST** **N/A**
1/8-1/4 **UPLAND, CA 91786**
0.145 mi.
764 ft. **Site 2 of 2 in cluster U**

Relative:
Lower

Actual:
1189 ft.

HIST UST:
Region: STATE
Facility ID: 00000013360
Facility Type: Other
Other Type: PAINTING CONTRACTOR
Total Tanks: 0003
Contact Name: Not reported
Telephone: 7149851105
Owner Name: LA MUNYON CONTRACTORS, INC.
Owner Address: 905 E. 8TH STREET
Owner City,St,Zip: UPLAND, CA 91786

Tank Num: 001
Container Num: B-84832
Year Installed: 1952
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 002
Year Installed: 1952
Tank Capacity: 00001000
Tank Used for: Not reported
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: 003
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: Not reported
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

79
East
1/8-1/4
0.165 mi.
872 ft.

R. G. WHEATLEY & COMPANY, INC.
153 N 010TH AVE
UPLAND, CA 91786

CA FID UST **S101619079**
SWEEPS UST **N/A**

Relative:
Lower

Actual:
1211 ft.

CA FID UST:

Facility ID:	36008536
Regulated By:	UTNKA
Regulated ID:	00010703
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	153 N 10TH AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	UPLAND 91786
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	A
Comp Number:	10703
Number:	9
Board Of Equalization:	44-020290
Ref Date:	06-30-88
Act Date:	06-30-88
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	36-000-010703-000001
Actv Date:	07-01-85
Capacity:	900
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	2

Status:	A
Comp Number:	10703
Number:	9
Board Of Equalization:	44-020290
Ref Date:	06-30-88
Act Date:	06-30-88
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	36-000-010703-000002
Actv Date:	07-01-85
Capacity:	5000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

80
ENE
1/8-1/4
0.207 mi.
1092 ft.

Relative:
Higher

Actual:
1256 ft.

SAN ANTONIO COMMUNITY HOSPITAL
999 SAN BERNARDINO RD
UPLAND, CA 91786

Database(s): RCRA-SQG, FINDS, HAZNET, UST, CA FID UST, EMI, San Bern. Co. Permit, SWEEPS UST

EDR ID Number: 1000102220
EPA ID Number: CAD072514060

RCRA-SQG:

Date form received by agency:	03/25/2002
Facility name:	SAN ANTONIO COMMUNITY HOSPITAL
Facility address:	999 SAN BERNARDINO ROAD UPLAND, CA 91786
EPA ID:	CAD072514060
Contact:	SANFORD K KNOX
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(909) 920-4897
Contact email:	SKNOX@SACH.ORG
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SAN ANTONIO COMMUNITY HOSPITAL
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	Unknown
Transporter of hazardous waste:	Unknown
Treater, storer or disposer of HW:	No
Underground injection activity:	Unknown
On-site burner exemption:	Unknown

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Lamps
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Pesticides
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Waste type: Thermostats
Accumulated waste on-site: Unknown
Generated waste on-site: Unknown

Historical Generators:
Date form received by agency: 03/25/2002
Facility name: SAN ANTONIO COMMUNITY HOSPITAL
Classification: Large Quantity Generator

Date form received by agency: 10/10/1986
Facility name: SAN ANTONIO COMMUNITY HOSPITAL
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110001165818

Environmental Interest/Information System
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD072514060
Contact:	SAN ANTONIO COMMUNITY HOSPITAL
Telephone:	9099852811
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	999 SAN BERNARDINO RD
Mailing City,St,Zip:	UPLAND, CA 917864920
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Tank bottom waste
Disposal Method:	Not reported
Tons:	.0625
Facility County:	San Bernardino

Gepaid:	CAD072514060
Contact:	SAN ANTONIO COMMUNITY HOSPITAL
Telephone:	9099852811
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	999 SAN BERNARDINO RD
Mailing City,St,Zip:	UPLAND, CA 917864920
Gen County:	San Bernardino
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Tank bottom waste
Disposal Method:	Recycler
Tons:	.7923
Facility County:	San Bernardino

Gepaid:	CAD072514060
Contact:	SAN ANTONIO COMMUNITY HOSPITAL
Telephone:	9099852811
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	999 SAN BERNARDINO RD
Mailing City,St,Zip:	UPLAND, CA 917864920
Gen County:	San Bernardino
TSD EPA ID:	CAT080025711
TSD County:	San Bernardino
Waste Category:	Waste oil and mixed oil

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Disposal Method: Recycler
Tons: .0625
Facility County: San Bernardino

Gepaid: CAD072514060
Contact: SAN ANTONIO COMMUNITY HOSPITAL
Telephone: 9099852811
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 999 SAN BERNARDINO RD
Mailing City,St,Zip: UPLAND, CA 917864920
Gen County: San Bernardino
TSD EPA ID: CAD000088252
TSD County: Los Angeles
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: .2500
Facility County: San Bernardino

Gepaid: CAD072514060
Contact: SAN ANTONIO COMMUNITY HOSPITAL
Telephone: 9099852811
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 999 SAN BERNARDINO RD
Mailing City,St,Zip: UPLAND, CA 917864920
Gen County: San Bernardino
TSD EPA ID: CAD000088252
TSD County: Los Angeles
Waste Category: Off-specification, aged, or surplus inorganics
Disposal Method: Transfer Station
Tons: .0500
Facility County: San Bernardino

Click this hyperlink while viewing on your computer to access
177 additional CA_HAZNET: record(s) in the EDR Site Report.

UST:
Global ID: 14827
Latitude: 34.10057
Longitude: -117.63808

CA FID UST:
Facility ID: 36003701
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 999 SAN BERNARDINO AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: UPLAND 91786
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

EMI:

Year:	1987
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	10
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	3
NOX - Oxides of Nitrogen Tons/Yr:	11
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	15
NOX - Oxides of Nitrogen Tons/Yr:	8
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Year:	1996
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	31
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	34
NOX - Oxides of Nitrogen Tons/Yr:	14
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	33
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	17
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	40
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	17
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	33
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	17
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	33
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	17
NOX - Oxides of Nitrogen Tons/Yr:	7
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	49
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	12
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	55
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	6

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2003
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	55
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	6
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2004
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	55.4066
Reactive Organic Gases Tons/Yr:	5.89
Carbon Monoxide Emissions Tons/Yr:	5.833
NOX - Oxides of Nitrogen Tons/Yr:	2.074
SOX - Oxides of Sulphur Tons/Yr:	0.06656
Particulate Matter Tons/Yr:	0.0589
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.05

Year:	2005
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5.133435
Reactive Organic Gases Tons/Yr:	.8582748065
Carbon Monoxide Emissions Tons/Yr:	7.9282
NOX - Oxides of Nitrogen Tons/Yr:	2.006
SOX - Oxides of Sulphur Tons/Yr:	3.38133
Particulate Matter Tons/Yr:	.0947
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.094004

Year:	2006

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	47.69735947894657496
Reactive Organic Gases Tons/Yr:	4.849
Carbon Monoxide Emissions Tons/Yr:	9.095
NOX - Oxides of Nitrogen Tons/Yr:	2.233
SOX - Oxides of Sulphur Tons/Yr:	3.41
Particulate Matter Tons/Yr:	.13
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.13

Year:	2007
County Code:	36
Air Basin:	SC
Facility ID:	14437
Air District Name:	SC
SIC Code:	8062
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	47.69735947894657496
Reactive Organic Gases Tons/Yr:	4.849
Carbon Monoxide Emissions Tons/Yr:	9.095
NOX - Oxides of Nitrogen Tons/Yr:	2.233
SOX - Oxides of Sulphur Tons/Yr:	3.41
Particulate Matter Tons/Yr:	.13
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.13

Year:	2007
County Code:	43
Air Basin:	SF
Facility ID:	14437
Air District Name:	BA
SIC Code:	9199
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.001
Reactive Organic Gases Tons/Yr:	.0008367
Carbon Monoxide Emissions Tons/Yr:	.003
NOX - Oxides of Nitrogen Tons/Yr:	.012
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.001
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.000976

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0005879
Owner:	SAN ANTONIO COMMUNITY HOSPITAL
Permit Number:	PT0020173
Permit Category:	EPCRA FACILITY
Facility Status:	ACTIVE

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005879
Owner: SAN ANTONIO COMMUNITY HOSPITAL
Permit Number: PT0002889
Permit Category: HAZMAT HANDLER 500+ EMPLOYEES (W/GEN PRMT)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005879
Owner: SAN ANTONIO COMMUNITY HOSPITAL
Permit Number: PT0011434
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005879
Owner: SAN ANTONIO COMMUNITY HOSPITAL
Permit Number: PT0002888
Permit Category: GENERATOR - 500+ EMPLOYEES
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0005879
Owner: SAN ANTONIO COMMUNITY HOSPITAL
Permit Number: PT0011435
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 7/31/2009 12:00:00AM

SWEEPS UST:
Status: A
Comp Number: 11279
Number: 1
Board Of Equalization: 44-020320
Ref Date: 09-11-91
Act Date: 09-11-91
Created Date: 09-23-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 36-000-011279-000001
Actv Date: 09-23-88
Capacity: 1
Tank Use: UNKNOWN
Stg: P
Content: UNKNOWN
Number Of Tanks: 2

Status: A
Comp Number: 11279
Number: 1
Board Of Equalization: 44-020320
Ref Date: 09-11-91

SAN ANTONIO COMMUNITY HOSPITAL (Continued) **1000102220**

Act Date:	09-11-91
Created Date:	09-23-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	36-000-011279-000002
Actv Date:	09-23-88
Capacity:	1
Tank Use:	UNKNOWN
Stg:	P
Content:	UNKNOWN
Number Of Tanks:	Not reported

81
East
1/8-1/4
0.214 mi.
1129 ft.

MR. T'S TOWING
997 E 8TH ST
UPLAND, CA 91786

San Bern. Co. Permit **S105047724**
N/A

Relative:
Lower

Actual:
1188 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0004889
Owner:	MOHSEN (BEN) GHANCIAN
Permit Number:	PT0000638
Permit Category:	SPECIAL HANDLER
Facility Status:	ACTIVE
Expiration Date:	4/30/2010 12:00:00AM

Region:	SAN BERNARDINO
Facility ID:	FA0004889
Owner:	MOHSEN (BEN) GHANCIAN
Permit Number:	PT0000637
Permit Category:	SPECIAL GENERATOR(B)
Facility Status:	ACTIVE
Expiration Date:	4/30/2010 12:00:00AM

82
NNE
1/8-1/4
0.224 mi.
1184 ft.

UPLAND JR HI SCHOOL
444 11TH ST
UPLAND, CA 91786

San Bern. Co. Permit **S102042655**
N/A

Relative:
Higher

Actual:
1287 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0006023
Owner:	UPLAND USD
Permit Number:	PT0006796
Permit Category:	LIMITED QUANTITY GENERATOR(B)
Facility Status:	ACTIVE
Expiration Date:	8/31/2009 12:00:00AM

V83 **B & D EQUIPMENT RENTAL** **San Bern. Co. Permit** **S104764122**
East **145 N 10TH AVE** **N/A**
1/8-1/4 **UPLAND, CA 91786**
0.245 mi.
1291 ft. **Site 1 of 3 in cluster V**

Relative:
Lower

Actual:
1209 ft.

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0001281
Owner: VERNACI, GEORGE
Permit Number: PT0004545
Permit Category: SPECIAL HANDLER
Facility Status: ACTIVE
Expiration Date: 8/31/2009 12:00:00AM

Region: SAN BERNARDINO
Facility ID: FA0001281
Owner: VERNACI, GEORGE
Permit Number: PT0004544
Permit Category: SPECIAL GENERATOR(B)
Facility Status: ACTIVE
Expiration Date: 8/31/2009 12:00:00AM

V84 **R. G. WHEATLEY & COMPANY, INC.** **HIST UST** **U001570703**
East **153 N 10TH AVE** **N/A**
1/8-1/4 **UPLAND, CA 91786**
0.245 mi.
1291 ft. **Site 2 of 3 in cluster V**

Relative:
Lower

Actual:
1210 ft.

HIST UST:
Region: STATE
Facility ID: 00000010703
Facility Type: Other
Other Type: GEN ENGINEERING CONT
Total Tanks: 0002
Contact Name: ROBERT G. WHEATLEY
Telephone: 7149827160
Owner Name: R. G. WHEATLEY & COMPANY, INC.
Owner Address: Not reported
Owner City,St,Zip: 153 NORTH 10TH AVENU, CA 91786

Tank Num: 001
Container Num: 1
Year Installed: 1965
Tank Capacity: 00000900
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1972
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

V85 **B AND D CONSTRUCTION** **FINDS** **1000905228**
East **145 N 10TH AVE** **RCRA-NonGen** **CA0000372284**
1/8-1/4 **UPLAND, CA 91786**
0.245 mi.
1291 ft. **Site 3 of 3 in cluster V**

Relative:
Lower

Actual:
1209 ft.

FINDS:

Registry ID: 110002617936

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

RCRA-NonGen:

Date form received by agency:	06/14/1994
Facility name:	B AND D CONSTRUCTION
Facility address:	145 N 10TH AVE UPLAND, CA 91786
EPA ID:	CA0000372284
Mailing address:	P O BOX 3 ETIWANDA, CA 91739
Contact:	GEORGE VERMACI
Contact address:	P O BOX 3 ETIWANDA, CA 91739
Contact country:	US
Contact telephone:	(909) 949-0360
Contact email:	Not reported
EPA Region:	09
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	GEORGE VERNACI
Owner/operator address:	P O BOX 3 ETIWANDA, CA 91739
Owner/operator country:	Not reported
Owner/operator telephone:	(909) 949-0360
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No

B AND D CONSTRUCTION (Continued) **1000905228**

Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Transporters - General
Date violation determined:	08/22/2006
Date achieved compliance:	09/05/2006
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	08/22/2006
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Evaluation Action Summary:

Evaluation date:	08/22/2006
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Transporters - General
Date achieved compliance:	09/05/2006
Evaluation lead agency:	State

86
East
1/8-1/4
0.248 mi.
1311 ft.

GUTIERREZ AUTO REPAIR **San Bern. Co. Permit** **S103368334**
1006 E 9TH ST **N/A**
UPLAND, CA 91786

Relative:
Lower

Actual:
1217 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0003659
Owner:	GUTIERREZ, MAURO
Permit Number:	PT0005317
Permit Category:	SPECIAL GENERATOR(B)
Facility Status:	ACTIVE
Expiration Date:	7/31/2009 12:00:00AM

Region:	SAN BERNARDINO
Facility ID:	FA0003659
Owner:	GUTIERREZ, MAURO
Permit Number:	PT0005316
Permit Category:	SPECIAL HANDLER
Facility Status:	ACTIVE
Expiration Date:	7/31/2009 12:00:00AM

87
South
1/8-1/4
0.248 mi.
1311 ft.

VERIZON WIRELESS
250 E 7TH ST
UPLAND, CA 91786

San Bern. Co. Permit

S102042480
N/A

Relative:
Lower

Actual:
1169 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0009016
Owner:	NEW CINGULAR WIRELESS PCS, LLC
Permit Number:	PT0015884
Permit Category:	HAZMAT HANDLER - UNSTAFFED REMOTE FACILITY
Facility Status:	INACTIVE
Expiration Date:	8/31/2005 12:00:00AM

Region:	SAN BERNARDINO
Facility ID:	FA0000730
Owner:	VERIZON WIRELESS
Permit Number:	PT0008337
Permit Category:	HAZMAT HANDLER 0-10 EMPLOYEES
Facility Status:	ACTIVE
Expiration Date:	11/30/2009 12:00:00AM

88
South
1/8-1/4
0.248 mi.
1312 ft.

MILLION SMILES DENTAL OFFICE
300 E 7TH STE 2H
UPLAND, CA 91786

San Bern. Co. Permit

S105974491
N/A

Relative:
Lower

Actual:
1168 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0007949
Owner:	GOCHEZ, JAIME
Permit Number:	PT0013917
Permit Category:	LIMITED QUANTITY GENERATOR(B)
Facility Status:	ACTIVE
Expiration Date:	9/30/2009 12:00:00AM

W89
North
1/4-1/2
0.340 mi.
1796 ft.

TERRY'S SHELL
183 FOOTHILL BLVD
UPLAND, CA 91786

Site 1 of 2 in cluster W

LUST
HIST CORTESE

S104748811
N/A

Relative:
Higher

Actual:
1325 ft.

LUST REG 8:

Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083602430T
Local Case Num:	92016
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	CLOS
Funding:	Not reported

TERRY'S SHELL (Continued) **S104748811**

How Discovered: Not reported
How Stopped: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Global ID: T0607100320
How Stopped Date: Not reported
Enter Date: 4/13/1994
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: Not reported
Enforcement Date: Not reported
Close Date: 10/27/2000
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: 4/13/1994
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 34.1072747
Longitude: -117.6487437
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class: *
Staff: VJJ
Staff Initials: LH6
Lead Agency: Local Agency
Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083602430T

W90 **CHEVRON #9-3078** **LUST** **S103891666**
North **188 FOOTHILL BLVD** **HIST CORTESE** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.340 mi.
1796 ft. **Site 2 of 2 in cluster W**

Relative:
Higher

Actual:
1325 ft.

LUST REG 8:

Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083601826T
Local Case Num:	91003
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	2ND STREET
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Piping
Global ID:	T0607100224
How Stopped Date:	2/22/1991
Enter Date:	7/17/1991
Review Date:	2/5/1991
Prelim Assess:	Not reported
Discover Date:	2/5/1991
Enforcement Date:	Not reported
Close Date:	6/19/1992
Workplan:	Not reported
Pollution Char:	7/9/1991
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	7/17/1991
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.1068657
Longitude:	-117.6486717
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported

CHEVRON #9-3078 (Continued) **S103891666**

Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 083601826T

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91 GOODYEAR TIRE CENTER **HAZNET S104581363**
North 913 FOOTHILL BLVD **LUST N/A**
1/4-1/2 UPLAND, CA 91786 **HIST CORTESE**
0.378 mi.
1998 ft.

Relative: Higher

Actual: 1330 ft.

HAZNET:
Gepaid: CAL000182468
Contact: BRUCE I SCHER
Telephone: 9093433100
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3863 TYLER ST
Mailing City,St,Zip: RIVERSIDE, CA 925030000
Gen County: San Bernardino
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Unspecified aqueous solution
Disposal Method: Recycler
Tons: .6879
Facility County: San Bernardino

Gepaid: CAL000182468
Contact: BRUCE I SCHER
Telephone: 9093433100
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3863 TYLER ST
Mailing City,St,Zip: RIVERSIDE, CA 925030000
Gen County: San Bernardino
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified aqueous solution
Disposal Method: Recycler
Tons: .2085
Facility County: San Bernardino

Gepaid: CAL000182468
Contact: BRUCE I SCHER
Telephone: 9093433100
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3863 TYLER ST
Mailing City,St,Zip: RIVERSIDE, CA 925030000
Gen County: San Bernardino
TSD EPA ID: CAT000613927

GOODYEAR TIRE CENTER (Continued) **S104581363**

TSD County: San Bernardino
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Transfer Station
Tons: .0625
Facility County: San Bernardino

Gepaid: CAL000182468
Contact: BRUCE I SCHER
Telephone: 9093433100
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3863 TYLER ST
Mailing City,St,Zip: RIVERSIDE, CA 925030000
Gen County: San Bernardino
TSD EPA ID: CAT000613927
TSD County: San Bernardino
Waste Category: Not reported
Disposal Method: Not reported
Tons: .0166
Facility County: San Bernardino

Gepaid: CAR000088112
Contact: RICHARD WARBURTON VP
Telephone: 9093433100
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 3863 TYLER ST
Mailing City,St,Zip: RIVERSIDE, CA 925030000
Gen County: 00
TSD EPA ID: CAT000613927
TSD County: 00
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Transfer Station
Tons: 0.58
Facility County: 0

Click this hyperlink while viewing on your computer to access
4 additional CA_HAZNET: record(s) in the EDR Site Report.

LUST REG 8:
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083602536T
Local Case Num: 94050
Case Type: Soil only
Substance: Waste Oil
Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street: MULBERRY
Enf Type: CLOS
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: UNK

GOODYEAR TIRE CENTER (Continued) **S104581363**

Leak Source:	UNK
Global ID:	T0607100345
How Stopped Date:	Not reported
Enter Date:	11/18/1994
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	7/21/1994
Enforcement Date:	Not reported
Close Date:	6/13/1995
Workplan:	7/27/1994
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	11/18/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.1071336
Longitude:	-117.6638381
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	1
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	RS
Staff Initials:	JC3
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

CORTESE:

Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083602536T

X92 **CHEVRON #9-3078** **LUST** **S109285151**
NNE **188 E FOOTHILL BLVD** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.380 mi.
2007 ft. **Site 1 of 2 in cluster X**

Relative:
Higher

Actual:
1328 ft.

LUST:

Region:	STATE
Global Id:	T0607100224
Latitude:	34.1068657

CHEVRON #9-3078 (Continued) **S109285151**

Longitude: -117.6486717
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1992-06-19 00:00:00
Lead Agency: SAN BERNARDINO COUNTY LOP
Case Worker: Not reported
Local Agency: SAN BERNARDINO COUNTY LOP
RB Case Number: 083601826T
LOC Case Number: 91003
File Location: Local Agency
Potential Media Affect: Soil
Potential Contaminats of Concern: Gasoline
Site History: Not reported

Y93 **WESTERN MMOULDINGS** **CERCLIS** **1000245611**
East **1111 EAST 8TH STREET** **RCRA-SQG** **CAD042928986**
1/4-1/2 **UPLAND, CA 91786** **FINDS**
0.383 mi. **HAZNET**
2024 ft. **Site 1 of 2 in cluster Y** **EMI**

Relative:
Lower

Actual:
1179 ft.

CERCLIS:
Site ID: 0906013
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Site Reassessment Ongoing

CERCLIS Site Contact Name(s):
Contact Name: Not reported
Contact Tel: Not reported
Contact Title: 92711

Contact Name: Not reported
Contact Tel: Not reported
Contact Title: 92700

Contact Name: Not reported
Contact Tel: Not reported
Contact Title: 13002

Contact Name: Not reported
Contact Tel: Not reported
Contact Title: 92700

Site Description: Not reported

CERCLIS Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/16/2002 0:00:00
Priority Level: Not reported

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: INDIAN HEAD INC
Facility address: 1111 E 8TH ST
UPLAND, CA 91786

WESTERN MMOULDINGS (Continued) **1000245611**

EPA ID:	CAD042928986
Mailing address:	E 8TH ST UPLAND, CA 91786
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	INDIAN HEAD INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	Unknown
Mixed waste (haz. and radioactive):	Unknown
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	Unknown
Furnace exemption:	Unknown
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

WESTERN MMOULDINGS (Continued) **1000245611**

Violation Status: No violations found

FINDS:

Registry ID: 110001165827

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

HAZNET:

Gepaid:	CAD042928986
Contact:	INDIAN HEAD INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 190
Mailing City,St,Zip:	UPLAND, CA 917850000
Gen County:	San Bernardino
TSD EPA ID:	CAD050806850
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	.6000
Facility County:	San Bernardino

Gepaid:	CAD042928986
Contact:	INDIAN HEAD INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 190
Mailing City,St,Zip:	UPLAND, CA 917850000
Gen County:	San Bernardino
TSD EPA ID:	CAD050806850
TSD County:	Los Angeles

WESTERN MMOULDINGS (Continued) **1000245611**

Waste Category:	Other inorganic solid waste
Disposal Method:	Transfer Station
Tons:	.8000
Facility County:	San Bernardino
Gepaid:	CAD042928986
Contact:	INDIAN HEAD INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 190
Mailing City,St,Zip:	UPLAND, CA 917850000
Gen County:	San Bernardino
TSD EPA ID:	CAT000646117
TSD County:	Kings
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Tons:	8.2000
Facility County:	San Bernardino
Gepaid:	CAD042928986
Contact:	INDIAN HEAD INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 190
Mailing City,St,Zip:	UPLAND, CA 917850000
Gen County:	San Bernardino
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method:	Recycler
Tons:	1.0425
Facility County:	San Bernardino
Gepaid:	CAD042928986
Contact:	INDIAN HEAD INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 190
Mailing City,St,Zip:	UPLAND, CA 917850000
Gen County:	San Bernardino
TSD EPA ID:	CAD009452657
TSD County:	San Mateo
Waste Category:	Waste oil and mixed oil
Disposal Method:	Disposal, Other
Tons:	2.5228
Facility County:	San Bernardino

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:

Year:	1990
County Code:	36
Air Basin:	SC

WESTERN MMOULDINGS (Continued) **1000245611**

Facility ID:	42743
Air District Name:	SC
SIC Code:	3449
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	56
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	42743
Air District Name:	SC
SIC Code:	3449
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	47
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Y94 **WESTERN MOLDINGS, INC.** **RESPONSE** **S101481928**
East **1111 EAST 8TH STREET** **ENVIROSTOR** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.383 mi.
2024 ft. **Site 2 of 2 in cluster Y**

Relative:
Lower

Actual:
1179 ft.

RESPONSE:

Facility ID:	36340063
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Lead Agency Description:	Not reported
Project Manager:	Not reported
Supervisor:	* HSALLOUM
Division Branch:	Cypress
Site Code:	Not reported
Assembly:	63
Senate:	31
Special Program Status:	Not reported
Status:	Refer: Other Agency
Status Date:	1995-10-25 00:00:00
Restricted Use:	NO
Funding:	Not reported
Latitude:	34.0927734943202

WESTERN MOLDINGS, INC. (Continued) **S101481928**

Longitude: -117.63668659682
Alias Name: 36340063
Alias Type: Envirostor ID Number
Alias Name: WESTERN MOLDINGS, INC.
Alias Type: Alternate Name

APN: NONE SPECIFIED
APN Description: Not reported

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 2002-06-04 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 1995-01-24 00:00:00

Confirmed: NONE SPECIFIED
Confirmed Description: Not reported
Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Media Affected: 10003, 10009, 10067, 10097, 10196, 10198, 10199
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported

Management:
Management Required: NONE SPECIFIED
Management Required Desc: Not reported
Potential: NONE SPECIFIED
Potenital Description: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported
PastUse: NONE SPECIFIED

ENVIROSTOR:
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * HSALLOUM
Division Branch: Cypress
Facility ID: 36340063

WESTERN MOLDINGS, INC. (Continued) **S101481928**

Site Code: Not reported
Assembly: 63
Senate: 31
Special Program: Not reported
Status: Refer: Other Agency
Status Date: 1995-10-25 00:00:00
Restricted Use: NO
Funding: Not reported
Latitude: 34.0927734943202
Longitude: -117.63668659682
Alias Name: 36340063
Alias Type: Envirostor ID Number
Alias Name: WESTERN MOLDINGS, INC.
Alias Type: Alternate Name

APN: NONE SPECIFIED
APN Description: Not reported

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 2002-06-04 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 1995-01-24 00:00:00

Confirmed: NONE SPECIFIED
Confirmed Description: Not reported
Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Media Affected: 10003, 10009, 10067, 10097, 10196, 10198, 10199
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported

Management:
Management Required: NONE SPECIFIED
Management Required Desc: Not reported
Potential: NONE SPECIFIED
Potenital Description: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported
PastUse: NONE SPECIFIED

X95 **TERRY'S SHELL** **LUST** **S109285156**
NNE **183 E FOOTHILL BLVD** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.385 mi.
2031 ft. **Site 2 of 2 in cluster X**

Relative:
Higher

Actual:
1330 ft.

LUST:

Region:	STATE
Global Id:	T0607100320
Latitude:	34.1072747
Longitude:	-117.6487437
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	2000-10-27 00:00:00
Lead Agency:	SAN BERNARDINO COUNTY LOP
Case Worker:	Not reported
Local Agency:	SAN BERNARDINO COUNTY LOP
RB Case Number:	083602430T
LOC Case Number:	92016
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminats of Concern:	Gasoline
Site History:	Not reported

Z96 **PACTRA COATINGS INCORPORATED** **RCRA-SQG** **1000418253**
SE **420 SOUTH 11TH AVENUE** **FINDS** **CAD048756555**
1/4-1/2 **UPLAND, CA 91786** **LUST**
0.388 mi. **HIST CORTESE**
2050 ft. **Site 1 of 2 in cluster Z**

Relative:
Lower

Actual:
1155 ft.

RCRA-SQG:

Date form received by agency:	08/04/1992
Facility name:	PACTRA COATINGS
Facility address:	420 S 11TH AVE UPLAND, CA 91786
EPA ID:	CAD048756555
Mailing address:	420 S ELEVEN AVE UPLAND, CA 91786
Contact:	RICHARD SOLOMON
Contact address:	25 A TECHNOLOGY DR IRVINE, CA 92718
Contact country:	US
Contact telephone:	(714) 753-0101
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AL DAVENPORT
Owner/operator address:	14540 HAYNES ST STE 104 VAN NUYS, CA 91411
Owner/operator country:	Not reported
Owner/operator telephone:	(818) 997-0755
Legal status:	Municipal

PACTRA COATINGS INCORPORATED (Continued) **1000418253**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110002448021

Environmental Interest/Information System
US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST REG 8:
Region: 8
County: San Bernardino
Regional Board: Santa Ana Region
Facility Status: Case Closed

PACTRA COATINGS INCORPORATED (Continued) **1000418253**

Case Number: 083601462T
Local Case Num: 92001
Case Type: Soil only
Substance: Hydrocarbons
Qty Leaked: Not reported
Abate Method: Vapor Extraction
Cross Street: Not reported
Enf Type: None Taken
Funding: Not reported
How Discovered: Not reported
How Stopped: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Global ID: T0607100174
How Stopped Date: Not reported
Enter Date: 3/21/1990
Review Date: Not reported
Prelim Assess: 4/6/1990
Discover Date: 2/1/1990
Enforcement Date: 1/1/1965
Close Date: 7/26/1994
Workplan: Not reported
Pollution Char: 5/13/1990
Remed Plan: 9/7/1990
Remed Action: 3/8/1991
Monitoring: Not reported
Enter Date: 3/21/1990
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 34.0884683
Longitude: -117.6366603
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: CAB
Staff Initials: RR1
Lead Agency: Regional Board
Local Agency: 36000L
Hydr Basin #: UPPER SANTA ANA VALL
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: 9/20/90 - WORK PLAN FOR FURTHER INVESTIGATION IS UNDER REVIEW. CLOSED.

CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA

PACTRA COATINGS INCORPORATED (Continued) **1000418253**

Reg Id: 083601462T

Z97 **PACTRA COATINGS** **LUST** **S109285107**
SE **420 S 11TH AVE** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.388 mi.
2050 ft. **Site 2 of 2 in cluster Z**

Relative:
Lower

Actual:
1155 ft.

LUST:

Region:	STATE
Global Id:	T0607100174
Latitude:	34.0884683
Longitude:	-117.6366603
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	1994-07-26 00:00:00
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	083601462T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminats of Concern:	Other Solvent or Non-Petroleum Hydrocarbon
Site History:	Not reported

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98 **SHELL SERVICE STATION** **Notify 65** **S100178999**
NNW **183 WEST FOOTHILL** **N/A**
1/4-1/2 **UPLAND, CA 91786**
0.399 mi.
2105 ft.

Relative:
Higher

Actual:
1335 ft.

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	91786-3848

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99 **UPLAND THRALL HALL USAR** **ENVIROSTOR** **S103393802**
ESE **1284 E. SEVENTH STREET** **N/A**
1/2-1 **UPLAND, CA 91764**
0.541 mi.
2854 ft.

Relative:
Lower

Actual:
1150 ft.

ENVIROSTOR:

Site Type:	Military Evaluation
Site Type Detailed:	Open Base
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported

UPLAND THRALL HALL USAR (Continued) **S103393802**

Division Branch: Cypress
Facility ID: 36970010
Site Code: 400688
Assembly: 63
Senate: 31
Special Program: Not reported
Status: * De-listed
Status Date: 2001-05-07 00:00:00
Restricted Use: NO
Funding: DERA
Latitude: 34.0879196458899
Longitude: -117.633874333822
Alias Name: USARC UPLAND
Alias Type: Alternate Name
Alias Name: 36970010
Alias Type: Envirostor ID Number
Alias Name: 400688
Alias Type: Project Code (Site Code)

APN: NONE SPECIFIED
APN Description: Not reported

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Delisting Document
Completed Date: 2001-05-07 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 1999-12-21 00:00:00

Confirmed: NONE SPECIFIED
Confirmed Description: Not reported
Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Media Affected: NONE SPECIFIED
Media Affected Desc: Not reported

Management:
Management Required: NONE SPECIFIED
Management Required Desc: Not reported
Potential: NONE SPECIFIED
Potenital Description: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported
PastUse: NONE SPECIFIED

100
West
1/2-1
0.758 mi.
4002 ft.

TEDEUM
1075 WEST 9TH STREET
UPLAND, CA 91786

ENVIROSTOR **S106893809**
N/A

Relative:
Higher

Actual:
1236 ft.

ENVIROSTOR:

Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cypress
Facility ID:	36000021
Site Code:	Not reported
Assembly:	63
Senate:	31
Special Program:	Not reported
Status:	Refer: 1248 Local Agency
Status Date:	2000-06-07 00:00:00
Restricted Use:	NO
Funding:	Not Applicable
Latitude:	0
Longitude:	0
Alias Name:	36000021
Alias Type:	Envirostor ID Number
APN:	NONE SPECIFIED
APN Description:	Not reported

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	SB 1248 Notification
Completed Date:	2008-05-27 00:00:00
Confirmed:	NONE SPECIFIED
Confirmed Description:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Media Affected:	NONE SPECIFIED
Media Affected Desc:	Not reported

Management:

Management Required:	NONE SPECIFIED
Management Required Desc:	Not reported
Potential:	NONE SPECIFIED
Potenital Description:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported
PastUse:	NONE SPECIFIED

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
UPLAND	S106841867	UPLAND CITY, FIRE DEPT # 1	475 N 2ND ST	91786	EMI
UPLAND	S108202526	CITY OF UPLAND/REDEVELOPMENT	210 / 395 E A ST	91786	HAZNET
UPLAND	S108223857	UPLAND MANOR INC	1125 W ARROW HWY # 34	91786	HAZNET
UPLAND	S106910637	A B C CONSTRUCTION SPECIALTIES	1777 W ARROW HWY 409	91786	San Bern. Co. Permit
UPLAND	S106911265	CORITAS PALLETS	2209 W ARROW RTE B	91786	San Bern. Co. Permit
UPLAND	S106926866	GREAT WESTERN BANK	1380 ARROW HWY	91786	SWEEPS UST
UPLAND	S109254416	AT&T CORP - CAK810	W ARROW RTE	91786	San Bern. Co. Permit
UPLAND	S109521098	PIERRE'S AUTO CLINIC	1693 W ARROW HWY UNIT B-1	91786	San Bern. Co. Permit
UPLAND	S109598380	ABANDONED USTS	164 3RD AVE167 SULTANA	91786	San Bern. Co. Permit
UPLAND	S106928450	LA VERNE CORPORATION	PO BOX 457, 138 S 2ND AVE	91786	SWEEPS UST
UPLAND	S103891720	ARCO	193 EUCLID AVE	91786	LUST, HIST CORTESE
UPLAND	S109285184	UNOCAL #5142	502 S EUCLID AVE	91786	LUST
UPLAND	S106487014	ATSF RIGHT-OF-WAY	N/A FMR. ATSF UPLAND STATION		SLIC
UPLAND	S108985943	ATSF RIGHT-OF-WAY	N/A FMR. ATFS UPLAND STA		SLIC
UPLAND	S109463541	UPLAND INTERCEPTOR RELIEF SEWER PH	GROVE AVE / G ST	91786	NPDES
UPLAND	S105624530	LAIDLAW TRANSIT INC.	1455 9TH STREET	91786	LUST
UPLAND	S104384499	LANDFILL,UPLAND-INERT-2430 ARR	2430 ARROW ROUTE	91786	WMUDS/SWAT
UPLAND	S101619064	EARL BENNETT TEXACO SER.	136 E ARROW HYWY	91786	CA FID UST, SWEEPS UST
UPLAND	S106910682	ARROW AUTO BODY	1685 ARROW RT C1	91786	San Bern. Co. Permit
UPLAND	S106910721	CORVETTE COLORS	1785 ARROW RT D2	91786	San Bern. Co. Permit

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/31/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 52

Source: EPA
Telephone: N/A
Last EDR Contact: 09/10/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/31/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 52

Source: EPA
Telephone: N/A
Last EDR Contact: 09/10/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/31/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 52

Source: EPA
Telephone: N/A
Last EDR Contact: 09/10/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/30/2009
Date Data Arrived at EDR: 08/11/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 41

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 09/30/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 09/02/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 19

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 09/09/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/30/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 82

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/02/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/02/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/02/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/02/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/31/2009
Date Data Arrived at EDR: 04/22/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/31/2009
Date Data Arrived at EDR: 04/22/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 05/15/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 62

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/06/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/27/2009
Date Data Arrived at EDR: 08/27/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/27/2009
Date Data Arrived at EDR: 08/27/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/02/2009
Date Data Arrived at EDR: 09/04/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 14

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 09/04/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2008
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/26/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Annually

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/24/2009
Date Data Arrived at EDR: 03/03/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/08/2009
Date Data Arrived at EDR: 06/09/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/20/2009
Date Data Arrived at EDR: 08/21/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 31
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/24/2009
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 26
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/24/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 28
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/21/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/03/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 14
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 15
Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/20/2009
Date Data Arrived at EDR: 08/21/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 31

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/24/2009
Date Data Arrived at EDR: 03/03/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/24/2009
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 26

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/21/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/03/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 14

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 06/04/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 109

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/27/2009
Date Data Arrived at EDR: 08/27/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2008
Date Data Arrived at EDR: 11/14/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/11/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Varies

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 07/06/2009
Date Data Arrived at EDR: 07/24/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 10

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/28/2009
Date Data Arrived at EDR: 05/29/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 17
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/26/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/01/2009
Date Data Arrived at EDR: 06/22/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 91
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/26/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/27/2009
Date Data Arrived at EDR: 08/27/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 22
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2009
Date Data Arrived at EDR: 07/23/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Varies

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/18/2009
Date Data Arrived at EDR: 08/21/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 09/08/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/13/2009
Date Data Arrived at EDR: 08/14/2009
Date Made Active in Reports: 08/20/2009
Number of Days to Update: 6

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/30/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/16/2009
Date Data Arrived at EDR: 07/16/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 67

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 05/09/2008
Date Made Active in Reports: 06/20/2008
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/18/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/02/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008
Date Data Arrived at EDR: 05/28/2008
Date Made Active in Reports: 08/08/2008
Number of Days to Update: 72

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/05/2008
Date Made Active in Reports: 09/23/2008
Number of Days to Update: 18

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/30/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/24/2009
Date Data Arrived at EDR: 05/19/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 125

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/06/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/23/2009
Date Data Arrived at EDR: 04/28/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 21

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/22/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/08/2009
Number of Days to Update: 1

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/28/2009
Date Data Arrived at EDR: 06/23/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 90

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 04/09/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 69

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 09/10/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 09/10/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 05/19/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 125

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 09/29/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 03/20/2009
Date Data Arrived at EDR: 03/20/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 08/05/2009
Date Made Active in Reports: 09/29/2009
Number of Days to Update: 55

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 08/05/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/06/2009
Date Data Arrived at EDR: 07/13/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 70

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/21/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/28/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 05/22/2009
Number of Days to Update: 92

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/09/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/31/2009
Date Data Arrived at EDR: 09/04/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 09/04/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Quarterly

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/17/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 50

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 07/14/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 9

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 06/29/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 09/08/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: N/A

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/21/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 14

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 07/31/2009
Number of Days to Update: 11

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/01/2009
Date Data Arrived at EDR: 09/02/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 16

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/26/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/23/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 11

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 09/18/2009
Date Data Arrived at EDR: 09/18/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 13

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 05/28/2009
Date Data Arrived at EDR: 08/13/2009
Date Made Active in Reports: 08/20/2009
Number of Days to Update: 7

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 08/10/2009
Date Data Arrived at EDR: 08/17/2009
Date Made Active in Reports: 08/20/2009
Number of Days to Update: 3

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 09/08/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/11/2009
Date Data Arrived at EDR: 04/23/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 18

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 08/10/2009
Date Data Arrived at EDR: 08/17/2009
Date Made Active in Reports: 08/27/2009
Number of Days to Update: 10

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/12/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/04/2009
Number of Days to Update: 4

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 08/26/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/04/2009
Date Data Arrived at EDR: 08/18/2009
Date Made Active in Reports: 08/27/2009
Number of Days to Update: 9

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 07/01/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 18
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/28/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/13/2009
Date Data Arrived at EDR: 09/04/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 14
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/05/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/04/2009
Number of Days to Update: 4
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/15/2009
Date Data Arrived at EDR: 07/16/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 7
Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 06/28/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/24/2009
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 23
Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 08/24/2009
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/16/2009
Number of Days to Update: 21
Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/24/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2008
Date Data Arrived at EDR: 12/23/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 08/17/2009
Next Scheduled EDR Contact: 11/16/2009
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 06/16/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/22/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/01/2008
Number of Days to Update: 12
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 08/21/2009
Date Data Arrived at EDR: 08/21/2009
Date Made Active in Reports: 08/27/2009
Number of Days to Update: 6
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/27/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 04/07/2009
Date Data Arrived at EDR: 04/07/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 34
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 05/29/2009
Date Data Arrived at EDR: 06/01/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 14
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/23/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Varies

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/31/2009
Date Data Arrived at EDR: 08/31/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 18
Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 08/31/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 07/01/2009
Date Data Arrived at EDR: 07/07/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 16
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 07/01/2009
Date Data Arrived at EDR: 07/10/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 14
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/21/2009
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 14
Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 10/05/2009
Next Scheduled EDR Contact: 01/18/2010
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 04/01/2009
Date Data Arrived at EDR: 04/02/2009
Date Made Active in Reports: 04/09/2009
Number of Days to Update: 7

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/28/2009
Date Data Arrived at EDR: 09/08/2009
Date Made Active in Reports: 09/18/2009
Number of Days to Update: 10

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/04/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2008
Date Data Arrived at EDR: 09/04/2008
Date Made Active in Reports: 09/18/2008
Number of Days to Update: 14

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 11/30/2009
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/04/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/26/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 15

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 07/22/2009
Date Data Arrived at EDR: 09/04/2009
Date Made Active in Reports: 09/16/2009
Number of Days to Update: 12

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/28/2009
Next Scheduled EDR Contact: 01/11/2010
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 09/09/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 05/05/2009
Date Made Active in Reports: 05/22/2009
Number of Days to Update: 17

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 08/04/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/28/2009
Date Data Arrived at EDR: 08/27/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 25

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/27/2009
Next Scheduled EDR Contact: 11/23/2009
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/11/2008
Date Made Active in Reports: 10/02/2008
Number of Days to Update: 21

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/08/2009
Next Scheduled EDR Contact: 12/07/2009
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/12/2009
Date Made Active in Reports: 06/29/2009
Number of Days to Update: 17

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 09/14/2009
Next Scheduled EDR Contact: 12/14/2009
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 07/17/2009
Date Made Active in Reports: 08/10/2009
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/24/2009
Next Scheduled EDR Contact: 01/04/2010
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

UPLAND SPECIFIC PLAN
NA
UPLAND, CA 91786

TARGET PROPERTY COORDINATES

Latitude (North):	34.09690 - 34° 5' 48.8''
Longitude (West):	117.6467 - 117° 38' 48.1''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	440344.7
UTM Y (Meters):	3772894.0
Elevation:	1232 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34117-A6 ONTARIO, CA
Most Recent Revision:	1981

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

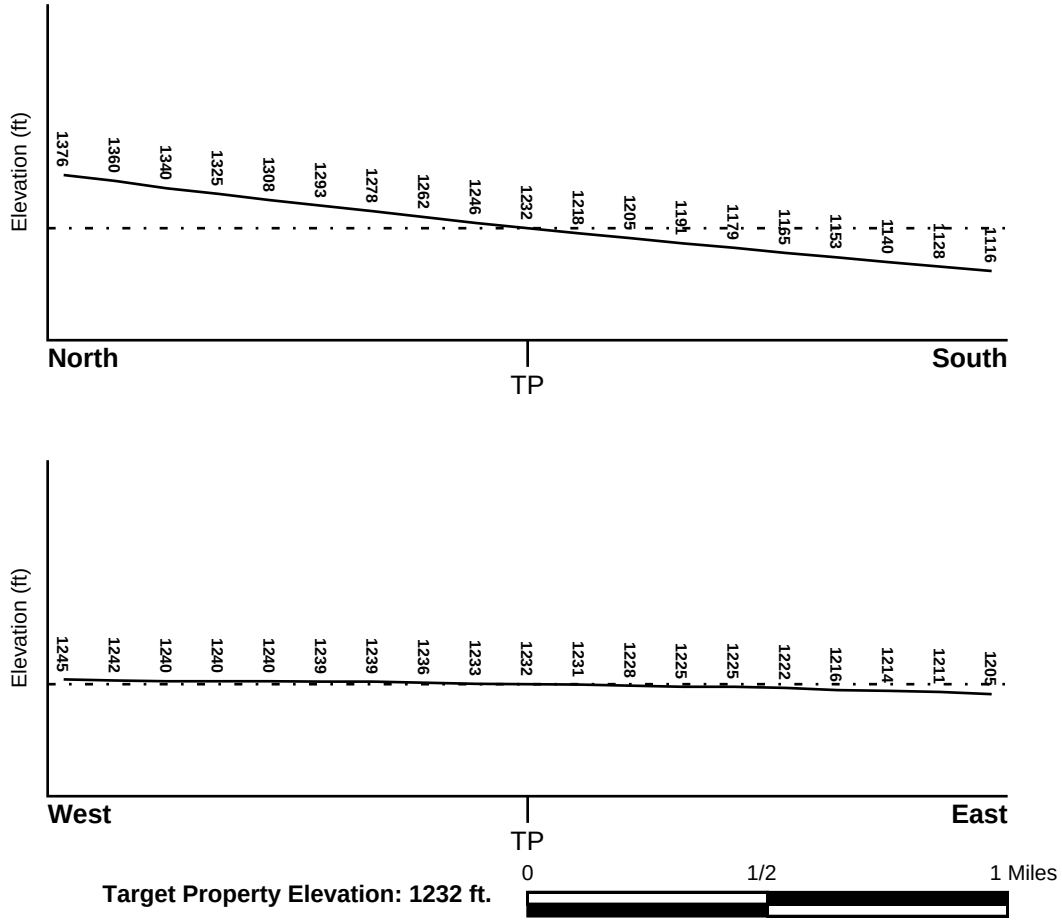
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN BERNARDINO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06071C8610F

Additional Panels in search area: 06071C8609F
06071C8608F

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ONTARIO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
5	1/2 - 1 Mile North	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

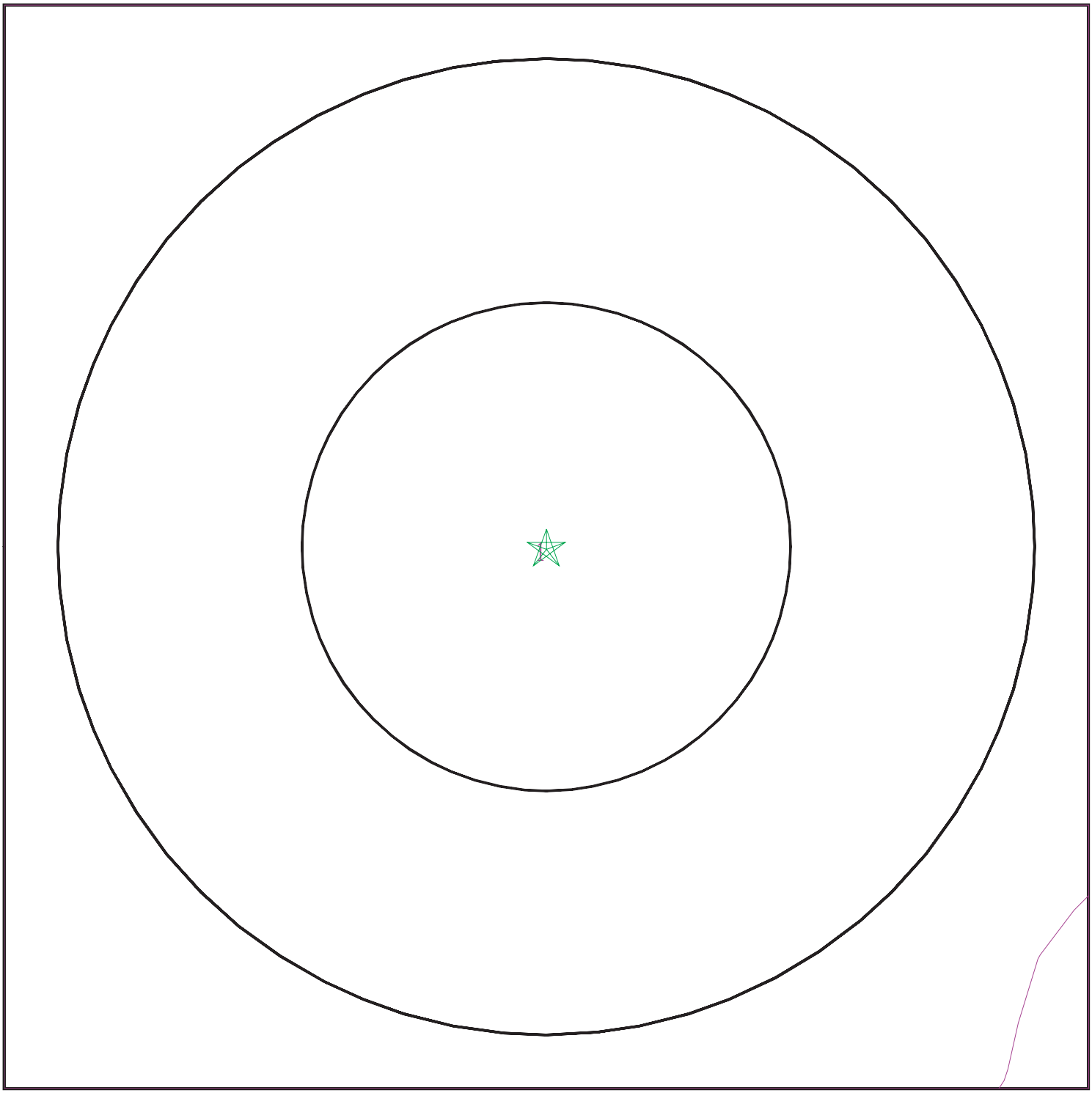
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2607331.2s



SITE NAME:	Upland Specific Plan	CLIENT:	RBF Consulting
ADDRESS:	NA Upland CA 91786	CONTACT:	Kristen Bogue
		INQUIRY #:	2607331.2s
LAT/LONG:	34.0969 / 117.6467	DATE:	October 06, 2009 1:32 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	18 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS3135042	1/8 - 1/4 Mile ESE
3	USGS3135158	1/2 - 1 Mile SSE
4	USGS3135151	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CA3610086	0 - 1/8 Mile WNW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A6	1075	1/2 - 1 Mile SSW
A7	1076	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 2607331.2s

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Upland Specific Plan	CLIENT: RBF Consulting
ADDRESS: NA	CONTACT: Kristen Bogue
Upland CA 91786	INQUIRY #: 2607331.2s
LAT/LONG: 34.0969 / 117.6467	DATE: October 06, 2009 1:32 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WNW
0 - 1/8 Mile
Higher

FRDS PWS **CA3610086**

PWS ID:	CA3610086		
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	WEST END CONSOLIDATED WATER COMPANY UPLAND, CA 917850460		
Addressee / Facility:	Not Reported		
Facility Latitude:	34 05 51	Facility Longitude:	117 38 51
City Served:	WOODCREST & VIC		
Treatment Class:	Untreated	Population:	100

Violations information not reported.

ENFORCEMENT INFORMATION:

System Name:	WEST END CONSOLIDATED WATE		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31		
Violation ID:	95V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	West End Consolidated Water Company		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	7/1/1993 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	95V0001		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	West End Consolidated Water Company		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	7/1/1993 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	95V0001		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	WEST END CONSOLIDATED WATER		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31		
Violation ID:	95V0001		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

2
ESE
1/8 - 1/4 Mile
Lower

FED USGS **USGS3135042**

Agency cd:	USGS	Site no:	340544117383301
Site name:	001S007W08N001S		
Latitude:	340544	EDR Site id:	USGS3135042
Longitude:	1173833	Dec lat:	34.09556563
Dec lon:	-117.6433875	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	071
Country:	US	Land net:	Not Reported
Location map:	ONTARIO	Map scale:	24000
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Santa Ana. California. Area = 1680 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	901	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	9479335800		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS3135158**

Agency cd:	USGS	Site no:	340517117382801
Site name:	001S007W17E001S		
Latitude:	340517	EDR Site id:	USGS3135158
Longitude:	1173828	Dec lat:	34.08806586
Dec lon:	-117.64199853	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	071
Country:	US	Land net:	Not Reported
Location map:	ONTARIO	Map scale:	24000
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Santa Ana. California. Area = 1680 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	1003	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	9479335800		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

4
SSW **FED USGS** **USGS3135151**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	340513117385801
Site name:	001S007W18G001S		
Latitude:	340513	EDR Site id:	USGS3135151
Longitude:	1173858	Dec lat:	34.08695474
Dec lon:	-117.65033209	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	071
Country:	US	Land net:	Not Reported
Location map:	ONTARIO	Map scale:	24000
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	Santa Ana. California. Area = 1680 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	1204	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	9479335800		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

5
North
1/2 - 1 Mile
Higher

AQUIFLOW **37846**

Site ID:	083601826T
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	>500
Date:	06/05/1992

A6
SSW
1/2 - 1 Mile
Lower

CA WELLS **1075**

Water System Information:

Prime Station Code:	01S/07W-18E01 S	User ID:	TAN
FRDS Number:	3610034009	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Destroyed
Source Lat/Long:	340500.0 1173900.0	Precision:	Undefined
Source Name:	WELL 10 - DESTROYED		
System Number:	3610034		
System Name:	ONTARIO, CITY OF		
Organization That Operates System:			
	303 EAST B STREET		
	ONTARIO, CA 91764		
Pop Served:	140000	Connections:	30927
Area Served:	ONTARIO CITY		

A7
SSW
1/2 - 1 Mile
Lower

CA WELLS **1076**

Water System Information:

Prime Station Code:	01S/07W-18G01 S	User ID:	TAN
FRDS Number:	3610034008	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340500.0 1173900.0	Precision:	Undefined
Source Name:	WELL 09		
System Number:	3610034		
System Name:	ONTARIO, CITY OF		
Organization That Operates System:			
	303 EAST B STREET		
	ONTARIO, CA 91764		
Pop Served:	140000	Connections:	30927
Area Served:	ONTARIO CITY		
Sample Collected:	08/14/2006	Findings:	16 MG/L
Chemical:	SODIUM		
Sample Collected:	08/14/2006	Findings:	24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/14/2006	Findings:	390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/14/2006	Findings:	7.8
Chemical:	PH, LABORATORY		

Sample Collected:	08/14/2006	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/14/2006	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/14/2006	Findings:	180 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08/14/2006	Findings:	53 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/14/2006	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/14/2006	Findings:	5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/14/2006	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/14/2006	Findings:	7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/14/2006	Findings:	240 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07/20/2006	Findings:	24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/22/2006	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2006	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/17/2006	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/31/2005	Findings:	390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/31/2005	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	10/31/2005	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	10/31/2005	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10/31/2005	Findings:	170 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10/31/2005	Findings:	160 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10/31/2005	Findings:	48 MG/L
Chemical:	CALCIUM		
Sample Collected:	10/31/2005	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10/31/2005	Findings:	14 MG/L
Chemical:	SODIUM		
Sample Collected:	10/31/2005	Findings:	1.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10/31/2005	Findings:	8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/31/2005	Findings:	280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

Sample Collected:	10/31/2005	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/26/2005	Findings:	380 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/26/2005	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/26/2005	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/26/2005	Findings:	180 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08/26/2005	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/26/2005	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/26/2005	Findings:	15 MG/L
Chemical:	SODIUM		
Sample Collected:	08/26/2005	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/26/2005	Findings:	8.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/26/2005	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/26/2005	Findings:	- .48
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	08/26/2005	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/26/2005	Findings:	11.4
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	08/26/2005	Findings:	5.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/26/2005	Findings:	7.1
Chemical:	PH, LABORATORY		
Sample Collected:	07/14/2005	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/11/2005	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	05/11/2005	Findings:	390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/11/2005	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	05/11/2005	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05/11/2005	Findings:	170 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/11/2005	Findings:	160 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	05/11/2005	Findings:	47 MG/L
Chemical:	CALCIUM		
Sample Collected:	05/11/2005	Findings:	9.9 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	05/11/2005	Findings:	13 MG/L
Chemical:	SODIUM		
Sample Collected:	05/11/2005	Findings:	1.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05/11/2005	Findings:	7.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/11/2005	Findings:	290 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/11/2005	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/28/2005	Findings:	14 MG/L
Chemical:	SODIUM		
Sample Collected:	01/28/2005	Findings:	380 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/28/2005	Findings:	7.7
Chemical:	PH, LABORATORY		
Sample Collected:	01/28/2005	Findings:	150 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01/28/2005	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01/28/2005	Findings:	160 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	01/28/2005	Findings:	48 MG/L
Chemical:	CALCIUM		
Sample Collected:	01/28/2005	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01/28/2005	Findings:	5.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	01/28/2005	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	01/28/2005	Findings:	8.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/28/2005	Findings:	220 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01/28/2005	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/14/2005	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/06/2005	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/30/2004	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/20/2004	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/10/2004	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/30/2004	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/17/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	10/25/2004	Findings:	260 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10/25/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/25/2004	Findings:	10 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/25/2004	Findings:	14 MG/L
Chemical:	SODIUM		
Sample Collected:	10/25/2004	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10/25/2004	Findings:	.511 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/25/2004	Findings:	1.12 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/25/2004	Findings:	5.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	10/25/2004	Findings:	390 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/25/2004	Findings:	7.6
Chemical:	PH, LABORATORY		
Sample Collected:	10/25/2004	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10/25/2004	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10/25/2004	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10/25/2004	Findings:	50 MG/L
Chemical:	CALCIUM		
Sample Collected:	10/25/2004	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10/22/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/14/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/29/2004	Findings:	.497 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	09/29/2004	Findings:	3.28 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	09/29/2004	Findings:	.975 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/17/2004	Findings:	410 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/17/2004	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	08/17/2004	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/17/2004	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/17/2004	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		

Sample Collected:	08/17/2004	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/17/2004	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/17/2004	Findings:	14 MG/L
Chemical:	SODIUM		
Sample Collected:	08/17/2004	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/17/2004	Findings:	8.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/17/2004	Findings:	1.31 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/17/2004	Findings:	.622 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/17/2004	Findings:	260 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/17/2004	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/17/2004	Findings:	.21 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08/17/2004	Findings:	4.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/17/2004	Findings:	2.4 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	08/17/2004	Findings:	4.8 UG/L
Chemical:	VANADIUM		
Sample Collected:	08/17/2004	Findings:	4.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	3.4 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	4.9 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	3.9 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	240 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	4.3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		

Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	240 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	3.8 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	240 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	5.5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	3.4 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	5.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/11/2004	Findings:	3.2 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/11/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/11/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/11/2004	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2004	Findings:	5.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	3.3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	260 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	5.1 UG/L
Chemical:	PERCHLORATE		

Sample Collected:	08/10/2004	Findings:	3.4 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	4.9 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/10/2004	Findings:	4.7 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/10/2004	Findings:	3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	5.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/10/2004	Findings:	3.9 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	250 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/10/2004	Findings:	3.7 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/10/2004	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08/10/2004	Findings:	240 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/10/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/10/2004	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		

Sample Collected:	08/04/2004	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/06/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/05/2003	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/04/2003	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/03/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/20/2003	Findings:	42 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/09/2003	Findings:	47 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/21/2003	Findings:	280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/21/2003	Findings:	120 UG/L
Chemical:	ALUMINUM		
Sample Collected:	08/21/2003	Findings:	3.2 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	08/21/2003	Findings:	4.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08/21/2003	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/21/2003	Findings:	500 UG/L
Chemical:	IRON		
Sample Collected:	08/21/2003	Findings:	3 UNITS
Chemical:	COLOR		
Sample Collected:	08/21/2003	Findings:	420 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/21/2003	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	08/21/2003	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08/21/2003	Findings:	180 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/21/2003	Findings:	180 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08/21/2003	Findings:	52 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/21/2003	Findings:	11 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/21/2003	Findings:	13 MG/L
Chemical:	SODIUM		
Sample Collected:	08/21/2003	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/21/2003	Findings:	9.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/21/2003	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	07/14/2003	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02/14/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/13/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/12/2003	Findings:	41 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/11/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/10/2003	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/26/2002	Findings:	42 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/06/2002	Findings:	4.8 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11/06/2002	Findings:	2.3 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	11/06/2002	Findings:	1.18 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/06/2002	Findings:	280 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/06/2002	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/06/2002	Findings:	5 UNITS
Chemical:	COLOR		
Sample Collected:	11/06/2002	Findings:	440 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/06/2002	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	11/06/2002	Findings:	140 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	11/06/2002	Findings:	170 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11/06/2002	Findings:	180 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	11/06/2002	Findings:	54 MG/L
Chemical:	CALCIUM		
Sample Collected:	11/06/2002	Findings:	12 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11/06/2002	Findings:	15 MG/L
Chemical:	SODIUM		
Sample Collected:	11/06/2002	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11/06/2002	Findings:	10 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/06/2002	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11/06/2002	Findings:	540 UG/L
Chemical:	COPPER		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	11/06/2002	Findings:	370 UG/L
Chemical:	IRON		
Sample Collected:	11/06/2002	Findings:	37 UG/L
Chemical:	LEAD		
Sample Collected:	11/06/2002	Findings:	25 UG/L
Chemical:	MANGANESE		
Sample Collected:	05/21/2002	Findings:	38 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/14/2002	Findings:	52 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/06/2002	Findings:	7.6 UG/L
Chemical:	PERCHLORATE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
91786	17	2	11.76

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91786

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.900 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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ATTACHMENT B
Historical Documentation

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ONTARIO QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

SW/4 ONTARIO 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey
Revised in cooperation with California Department of Water Resources

Control by USGS, NOS/NOAA, and Los Angeles County

Topography by planetable surveys 1925, 1933–34 and 1939
Planimetry revised by photogrammetric methods from aerial photographs taken 1966. Field checked 1967

Polyconic projection. 10,000-foot grid ticks based on California coordinate system, zones 5 and 7. 1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 2 meters north and 84 meters east as shown by dashed corner ticks

Red tint indicates areas in which only landmark buildings are shown

Fine red dashed lines indicate selected fence lines

There may be private inholdings within the boundaries of the National or State reservations shown on this map

Revisions shown in purple and woodland compiled from aerial photographs taken 1978 and other sources. This information not field checked. Map edited 1981

UTM GRID AND 1981 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
Interstate Route — U.S. Route — State Route

ONTARIO, CALIF.
SW/4 ONTARIO 15' QUADRANGLE
N3400—W11737.5/7.5

1967
PHOTOREVISED 1981
DMA 2452 II SW–SERIES V895

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1982

MAP SCALE 1" = 500'

250 0 500 1000 FEET

50 0 150 300 ME

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 8607H

FIRM

FLOOD INSURANCE RATE MAP

SAN BERNARDINO COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 8607 OF 9400

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RANCHO CUCAMONGA, CITY OF	060671	8607	H
UPLAND, CITY OF	065067	8607	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06071C8607H

MAP REVISED
AUGUST 28, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Upland Specific Plan
NA
Upland, CA 91786

Inquiry Number: 2607331.5
October 07, 2009

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

Aerial Photography October 07, 2009

Target Property:

NA

Upland, CA 91786

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=555'	Flight Year: 1938	Laval
1949	Aerial Photograph. Scale: 1"=500'	Flight Year: 1949	Fairchild
1953	Aerial Photograph. Scale: 1"=555'	Flight Year: 1953	Southwestern
1969	Aerial Photograph. Scale: 1"=600'	Flight Year: 1969	AMI
1977	Aerial Photograph. Scale: 1"=666'	Flight Year: 1977	Teledyne
1990	Aerial Photograph. Scale: 1"=666'	Flight Year: 1990	USGS
1994	Aerial Photograph. Scale: 1"=666'	Flight Year: 1994	USGS
2002	Aerial Photograph. Scale: 1"=666'	Flight Year: 2002	USGS
2005	Aerial Photograph. 1" = 604'	Flight Year: 2005	EDR

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YEAR: 1938

= 555'

N

INQUIRY #: 2607331.5
YEAR: 1949
= 500'
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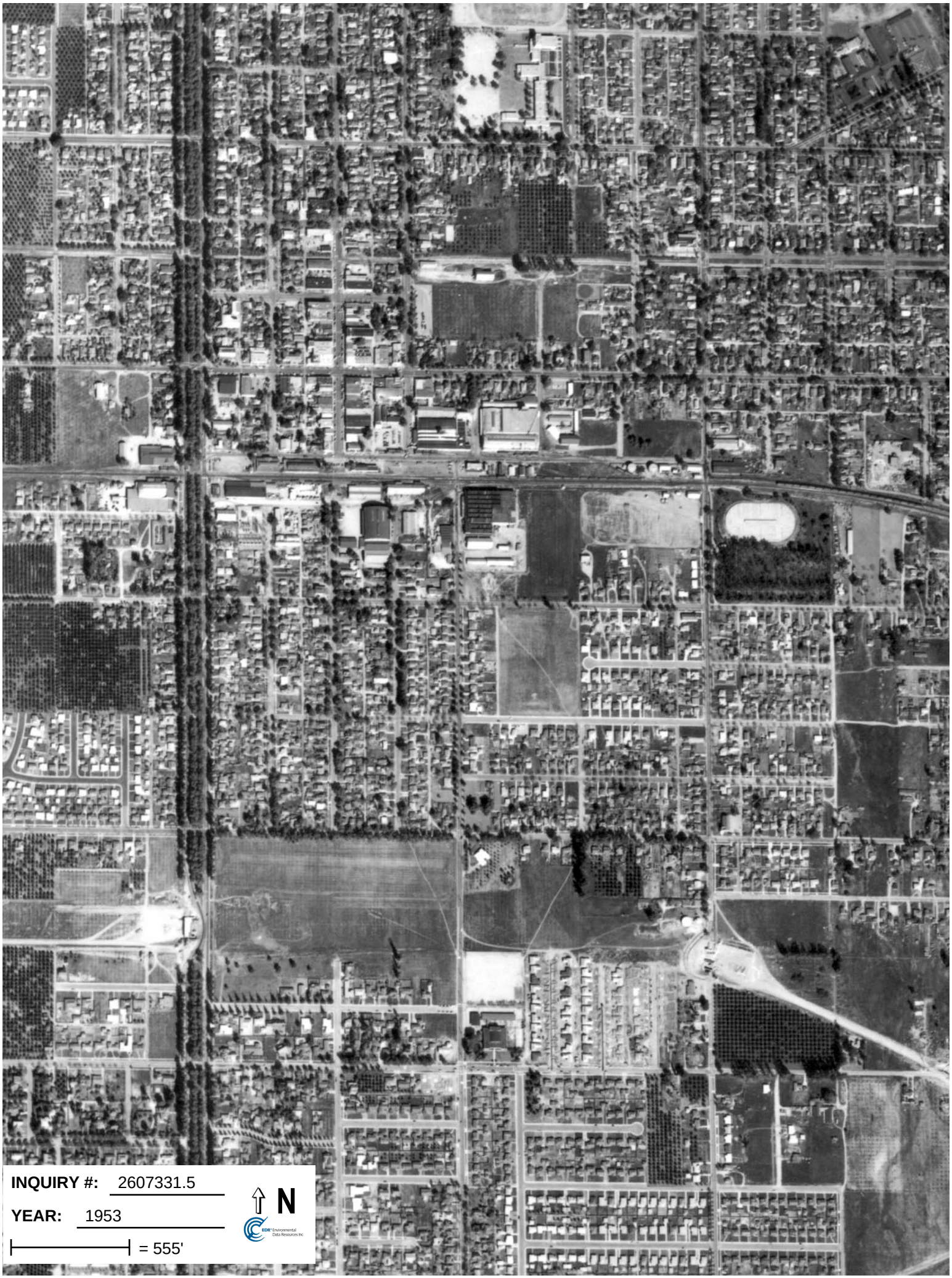
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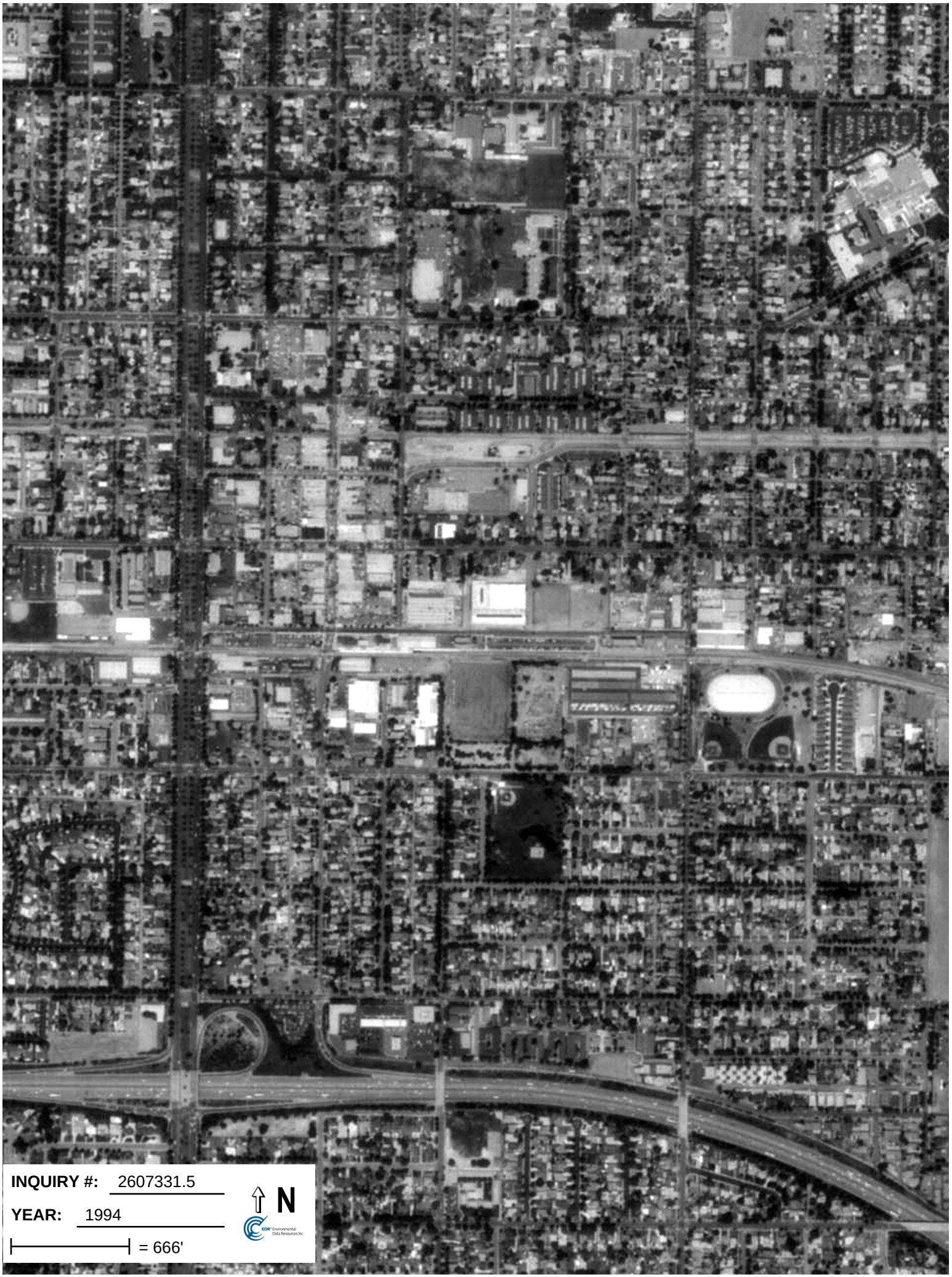
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YEAR: 1994
= 666'
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INQUIRY #: 2607331.5
YEAR: 2002
= 666'
N

INQUIRY #: 2607331.5
YEAR: 2005
= 604'
N

Upland Specific Plan
NA
Upland, CA 91786

Inquiry Number: 2607331.4
October 06, 2009

The EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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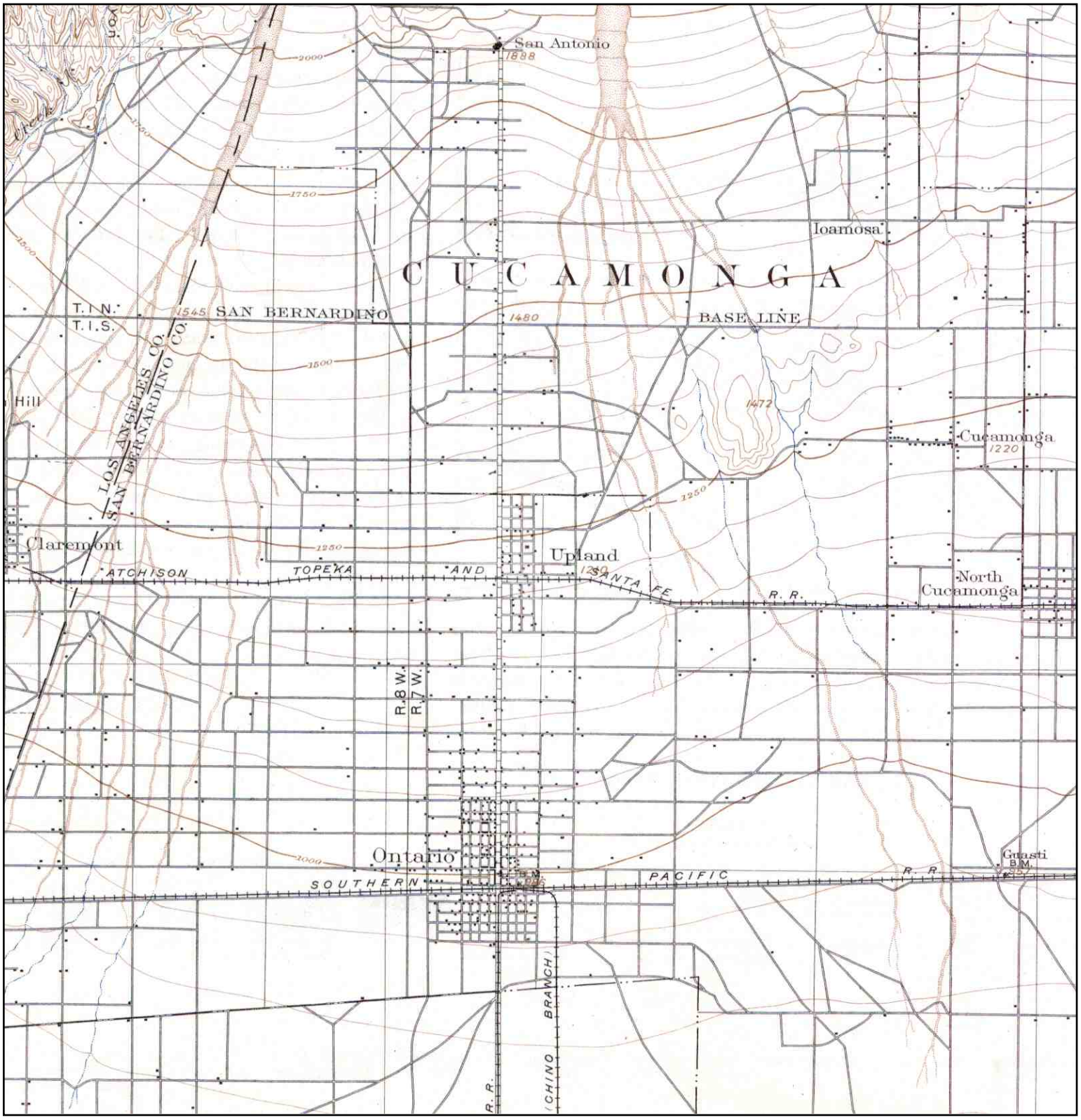
Historical Topographic Map

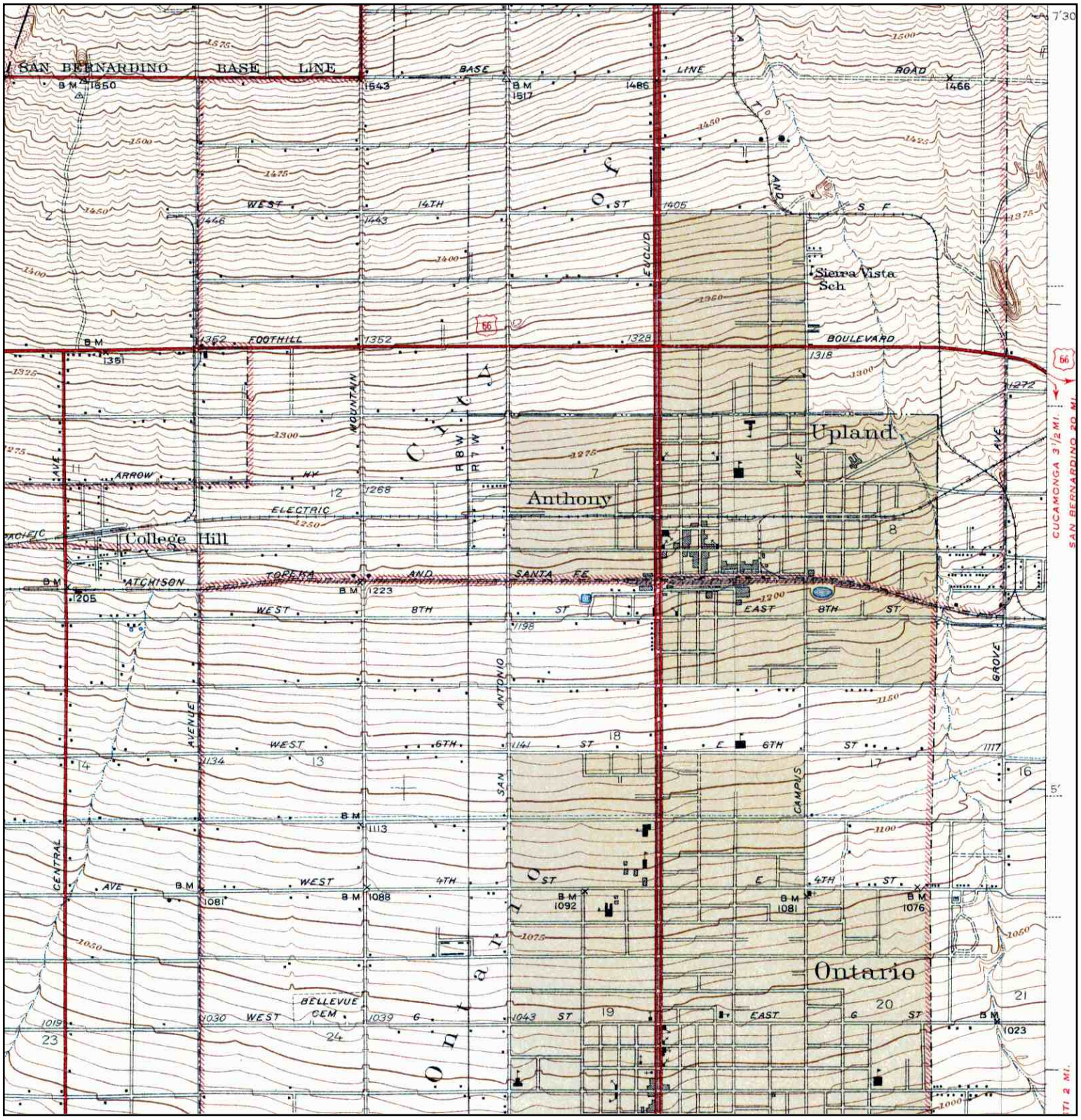
N	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: Upland Specific Plan ADDRESS: NA Upland, CA 91786 LAT/LONG: 34.0969 / 117.6467	CLIENT: RBF Consulting CONTACT: Kristen Bogue INQUIRY#: 2607331.4 RESEARCH DATE: 10/06/2009

Historical Topographic Map



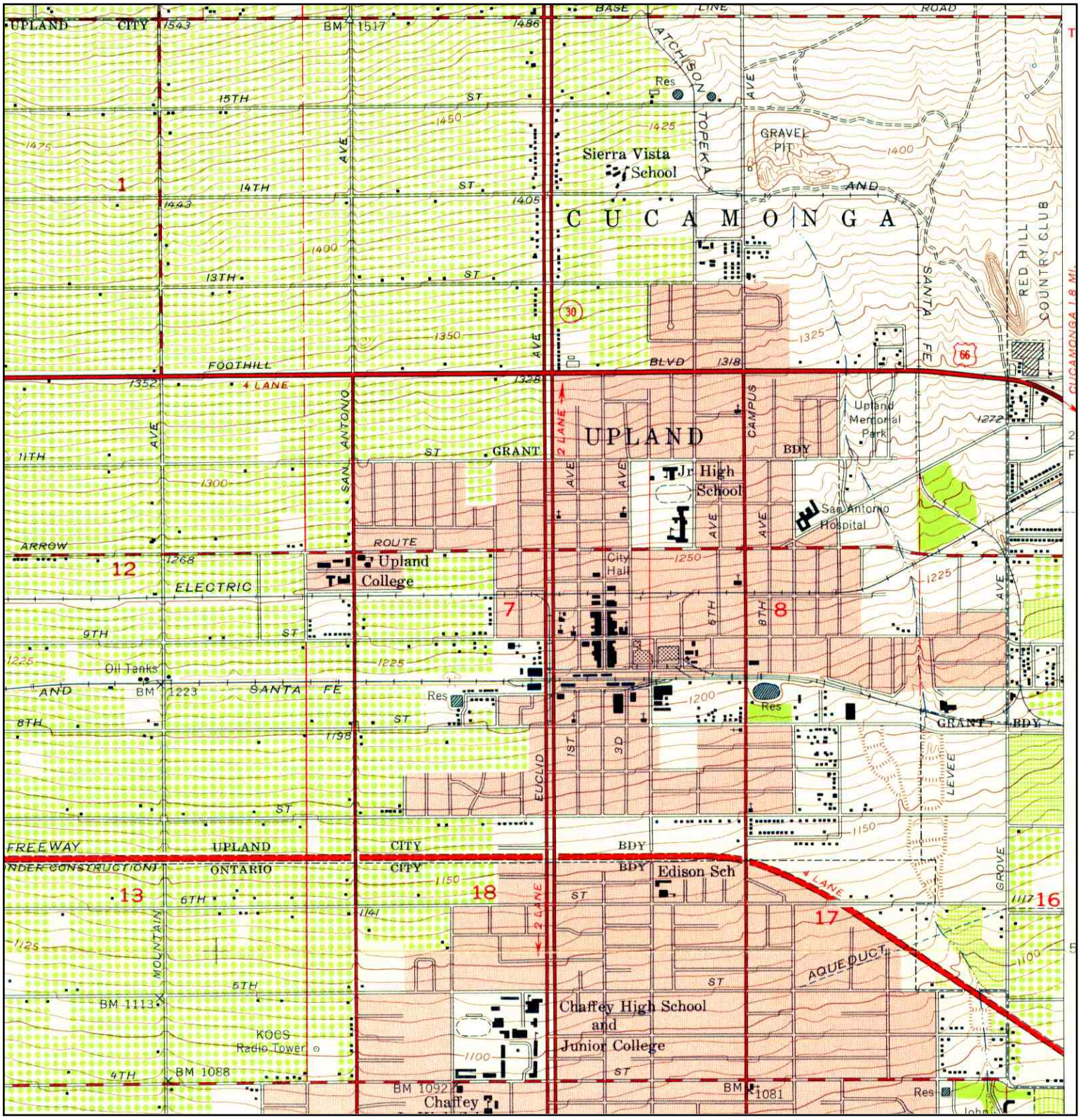
N	TARGET QUAD NAME: CUCAMONGA MAP YEAR: 1903 SERIES: 15 SCALE: 1:62500	SITE NAME: Upland Specific Plan ADDRESS: NA Upland, CA 91786 LAT/LONG: 34.0969 / 117.6467	CLIENT: RBF Consulting CONTACT: Kristen Bogue INQUIRY#: 2607331.4 RESEARCH DATE: 10/06/2009

Historical Topographic Map



N	TARGET QUAD NAME: ONTARIO AND VICINITY MAP YEAR: 1942 SERIES: 7.5 SCALE: 1:31680	SITE NAME: Upland Specific Plan ADDRESS: NA Upland, CA 91786 LAT/LONG: 34.0969 / 117.6467	CLIENT: RBF Consulting CONTACT: Kristen Bogue INQUIRY#: 2607331.4 RESEARCH DATE: 10/06/2009

Historical Topographic Map



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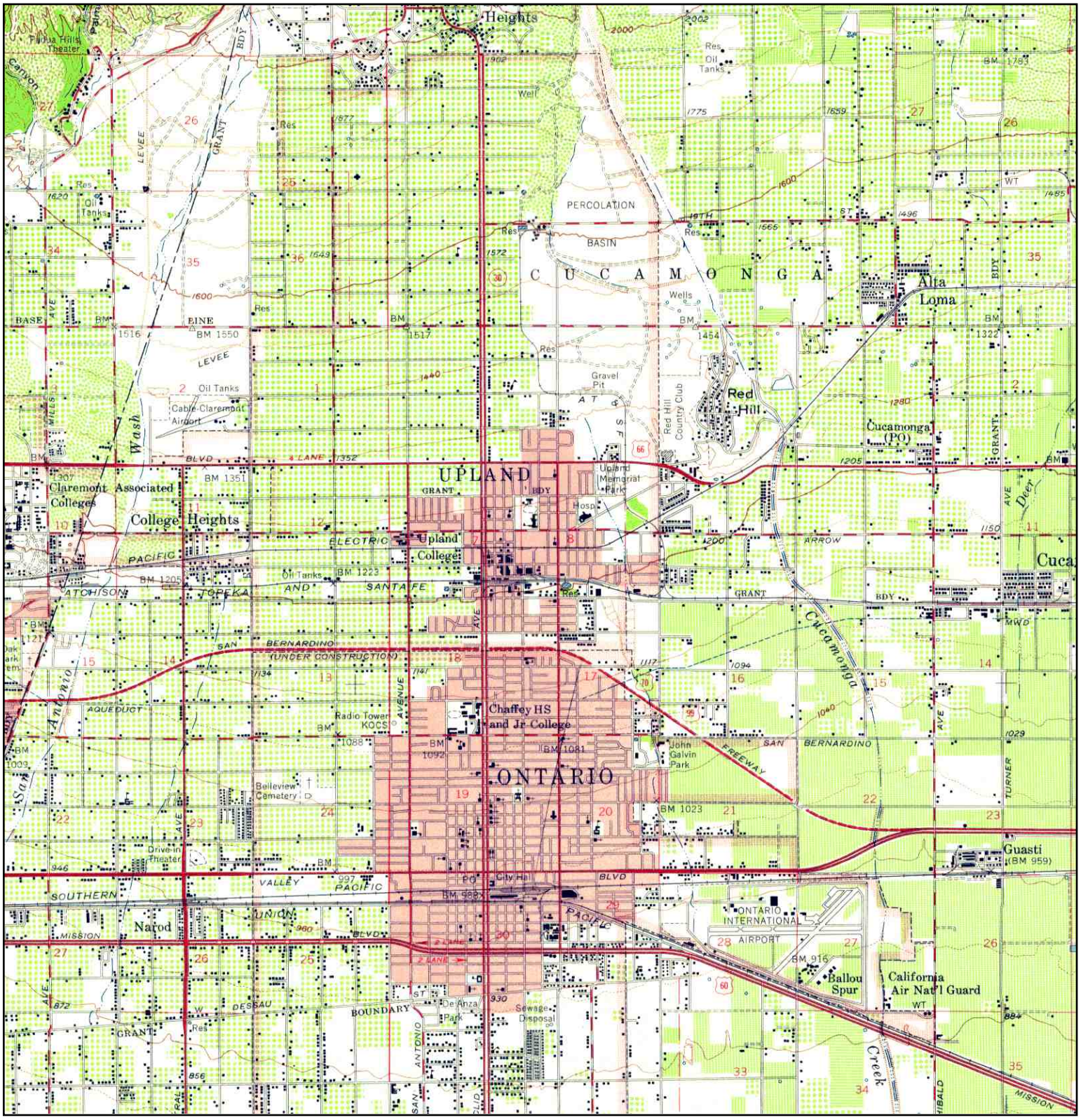
Historical Topographic Map



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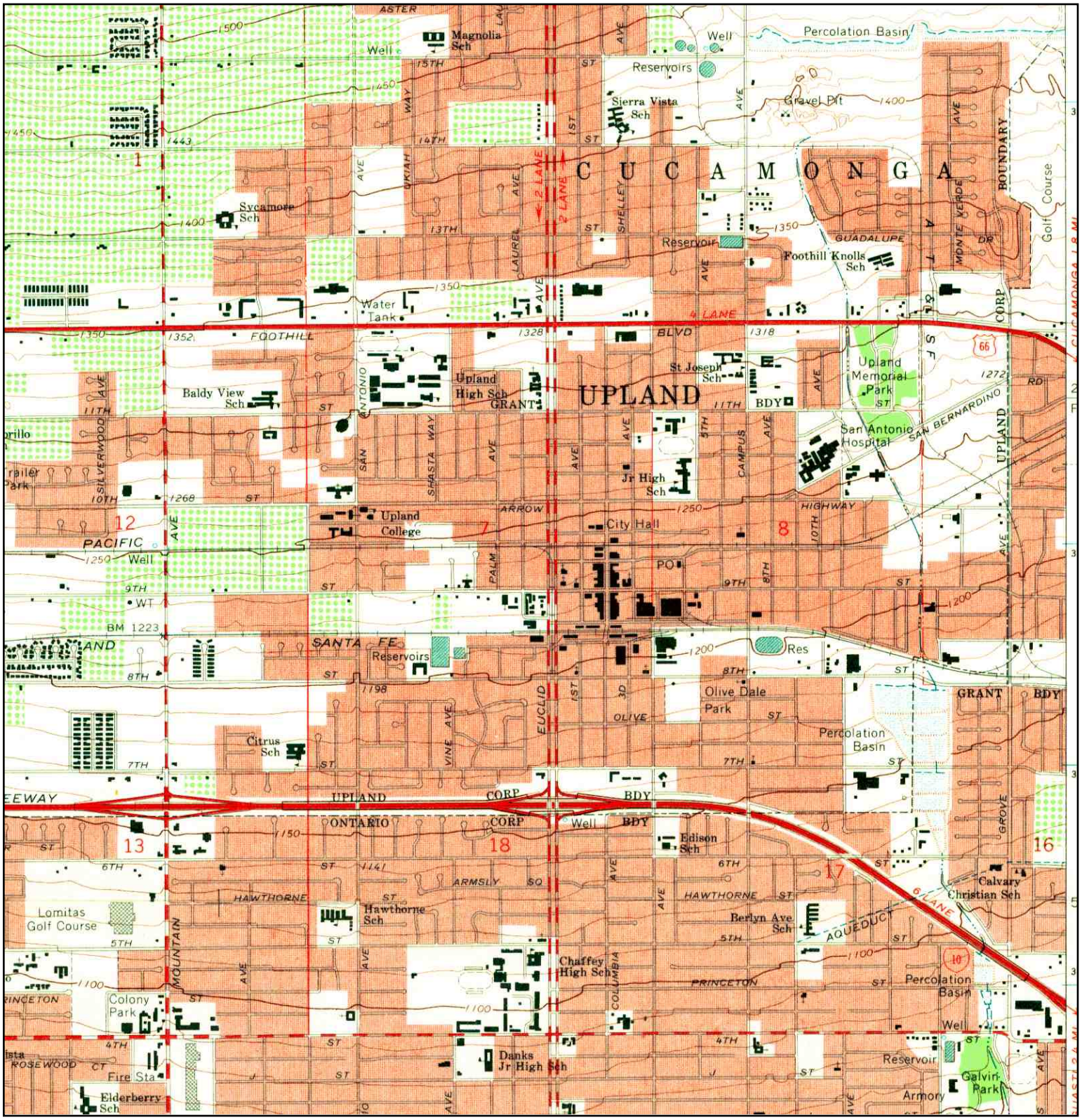
Historical Topographic Map



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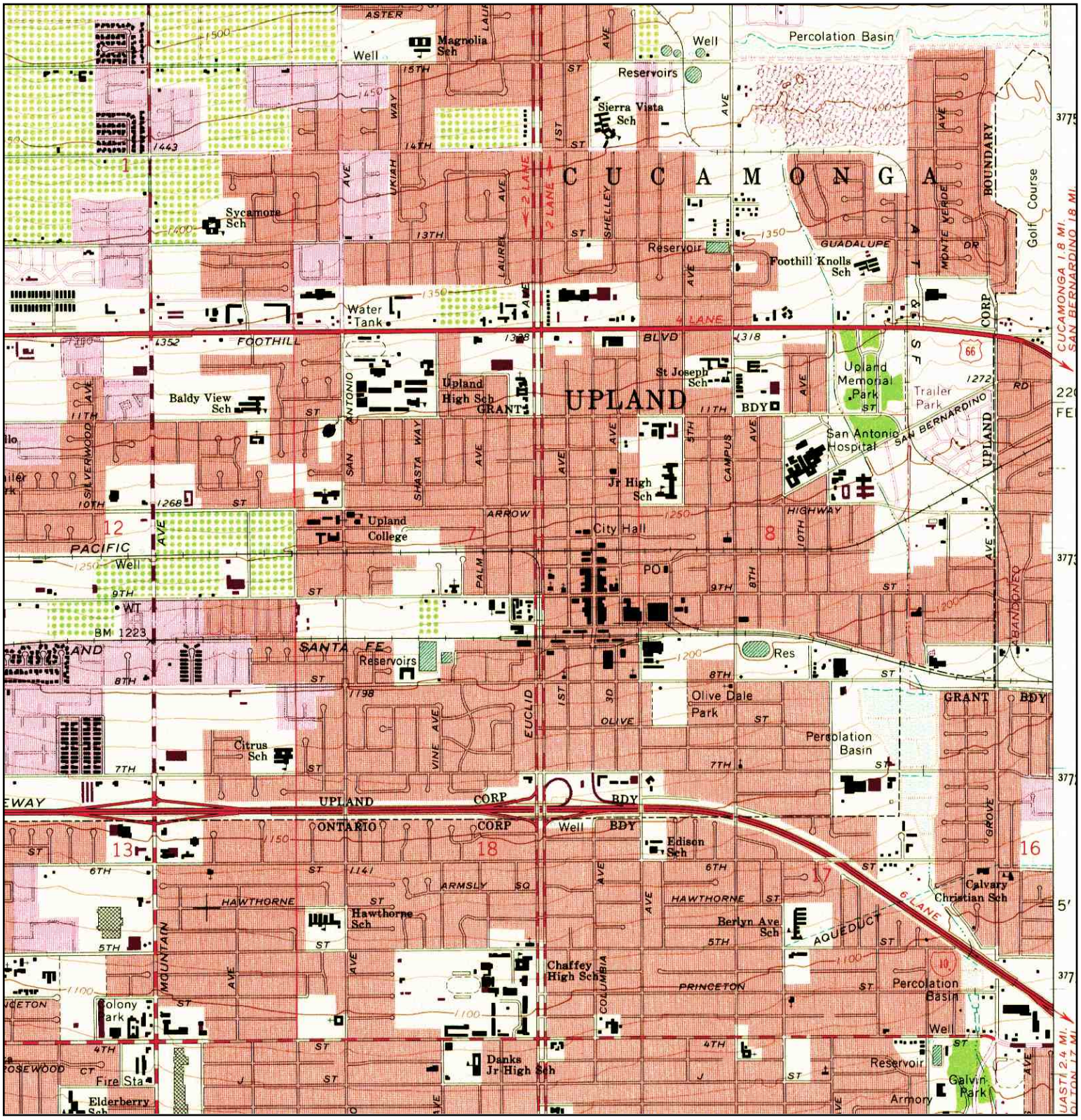
Historical Topographic Map



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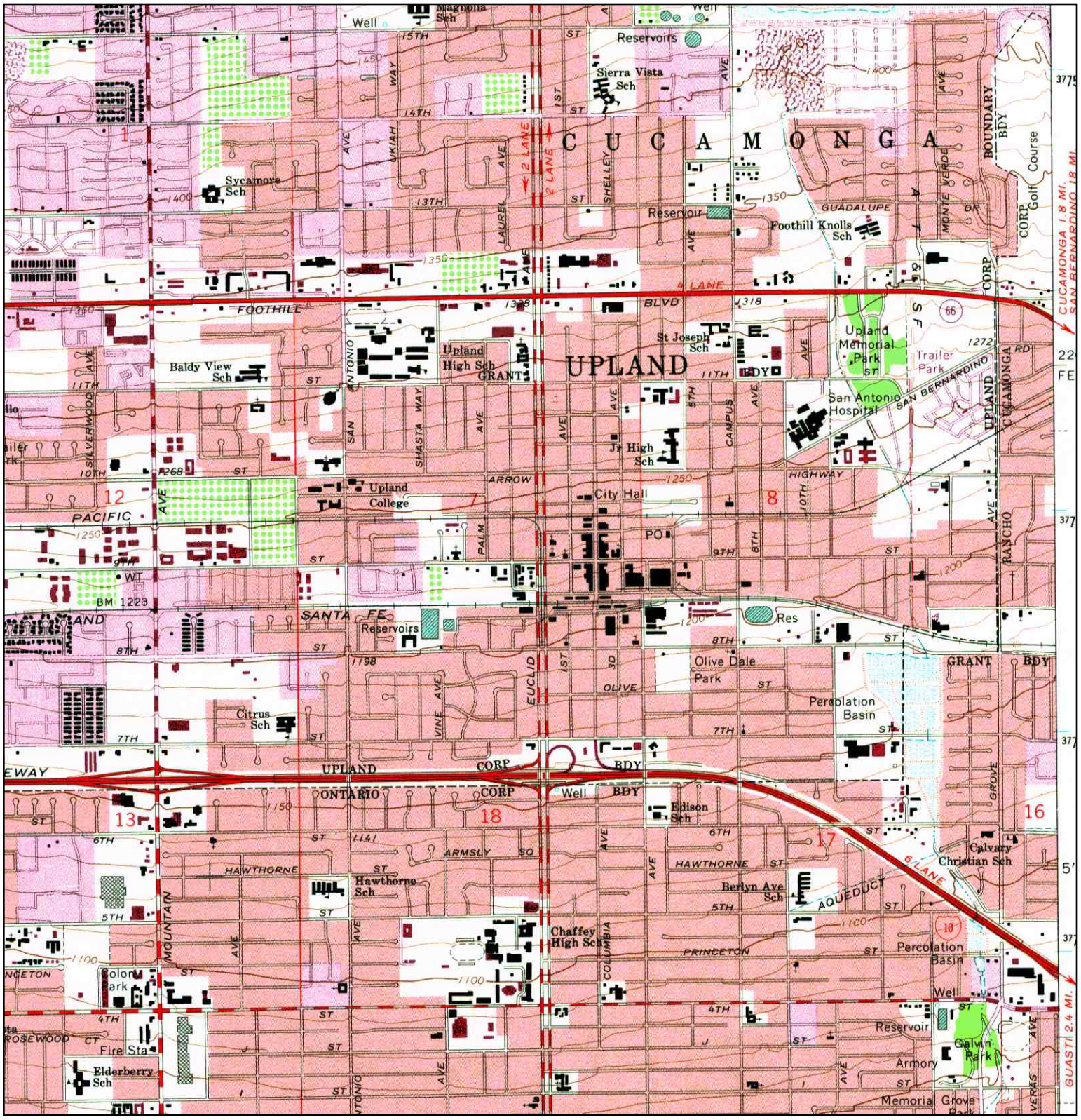

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Upland Specific Plan
NA
Upland, CA 91786

Inquiry Number: 2607331.3
October 06, 2009

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800.352.0050
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Certified Sanborn® Map Report

10/06/09

Site Name:
Upland Specific Plan
NA
Upland, CA 91786

Client Name:
RBF Consulting
14725 Alton Parkway
Irvine, CA 92618

EDR Inquiry # 2607331.3

Contact: Kristen Bogue

EDR® Environmental Data Resources Inc

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Certified Sanborn Results:

Site Name: Upland Specific Plan
Address: NA
City, State, Zip: Upland, CA 91786
Cross Street:
P.O. # 10-105851
Project: Upland Specific
Certification # 797E-4CF8-BC44

Maps Provided:

1955
1950
1932
1930
1928
1912
1907

Sanborn® Library search results
Certification # 797E-4CF8-BC44

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Certified Sanborn® Map Report Enhancements for 2009

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· Your target property is centered on each map. You can quickly locate your target property and view adjoining properties. Plus, adjoining properties are included more often, reducing your need to refer to additional maps.

· All maps are now displayed at a uniform scale. This makes it easier for you to view changes to the property over time.

· We've increased coverage by adding thousands of new maps from 40 cities for years 1994-2007.

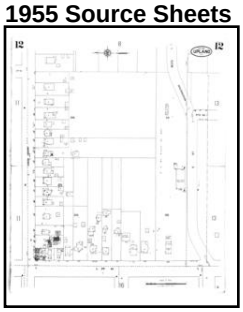
· A new Map Key and Sheet Thumbnails let you reference sheet numbers, year and volume of original Sanborn Map panels used for this report.

For more information about the new enhancements to the Certified Sanborn Map Report, contact your EDR representative at 800-352-0050.

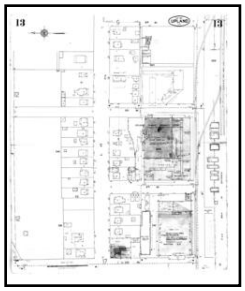
Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1955 Source Sheets



Volume 1, Sheet 12



Volume 1, Sheet 13

Volume 1, Sheet 16

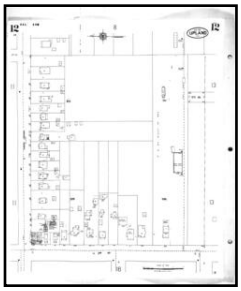
Volume 1, Sheet 17

1950 Source Sheets

Volume 1, Sheet 13

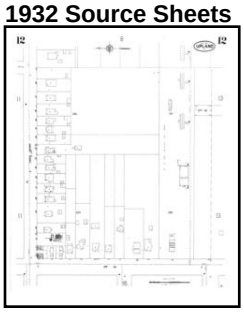
Volume 1, Sheet 16

Volume 1, Sheet 17



Volume 1, Sheet 12

1932 Source Sheets



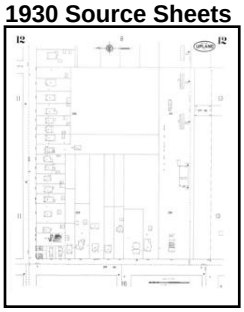
Volume 1, Sheet 12

Volume 1, Sheet 13

Volume 1, Sheet 16

Volume 1, Sheet 17

1930 Source Sheets



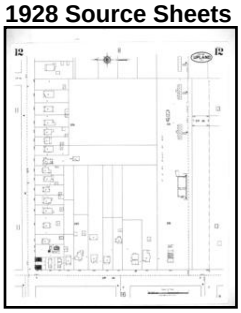
Volume 1, Sheet 12

Volume 1, Sheet 13

Volume 1, Sheet 17

Volume 1, Sheet 16

1928 Source Sheets



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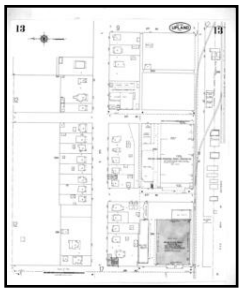

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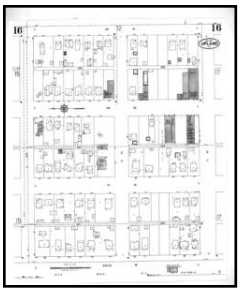


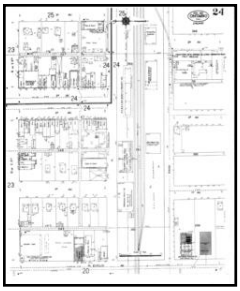
Volume 1, Sheet 16

Volume 1, Sheet 17

1912 Source Sheets

Volume 1, Sheet 22

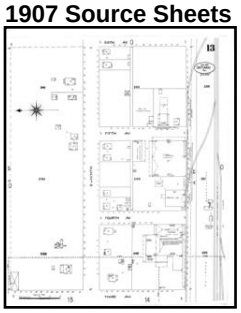
Volume 1, Sheet 23



Volume 1, Sheet 24

Volume 1, Sheet 25

1907 Source Sheets



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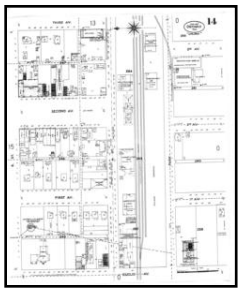
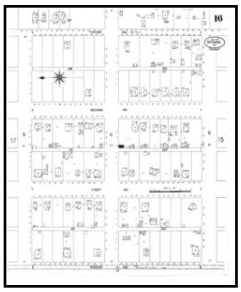


Volume 1, Sheet 14

Volume 1, Sheet 15



Volume 1, Sheet 16

1955 Certified Sanborn Map

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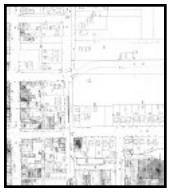
Certification # 797E-4CF8-BC44

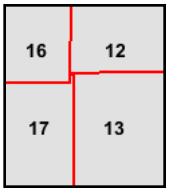
Site Name:	Upland Specific Plan
Address:	NA
City, ST, ZIP:	Upland CA 91786
Client:	RBF Consulting
EDR Inquiry:	2607331.3
Order Date:	10/6/2009 3:32:07 PM
Certification #	797E-4CF8-BC44

Copyright: 1955

This Certified Sanborn Map combines the following sheets (thumbnails on page 3).

0 Feet 150 300 600

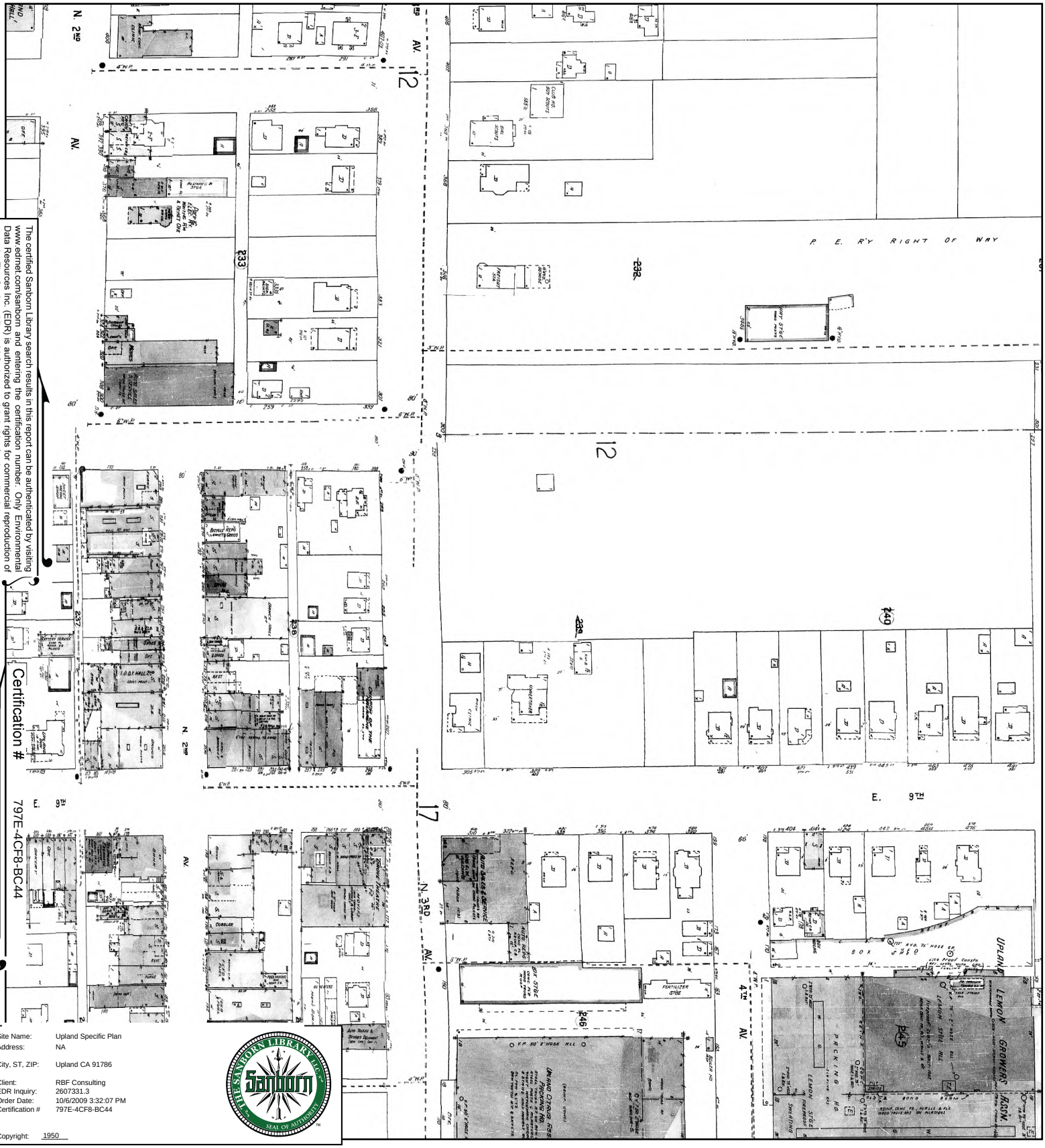




Volume 1, Sheet 12
Volume 1, Sheet 13
Volume 1, Sheet 16
Volume 1, Sheet 17

N

1950 Certified Sanborn Map



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Certification # 797E-4CF8-BC44

Site Name: Upland Specific Plan
Address: NA
City, ST, ZIP: Upland CA 91786

Client: RBF Consulting
EDR Inquiry: 2607331.3
Order Date: 10/6/2009 3:32:07 PM
Certification # 797E-4CF8-BC44

Copyright: 1950

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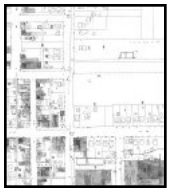

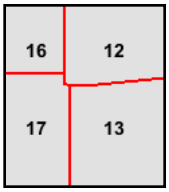

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Volume 1, Sheet 17
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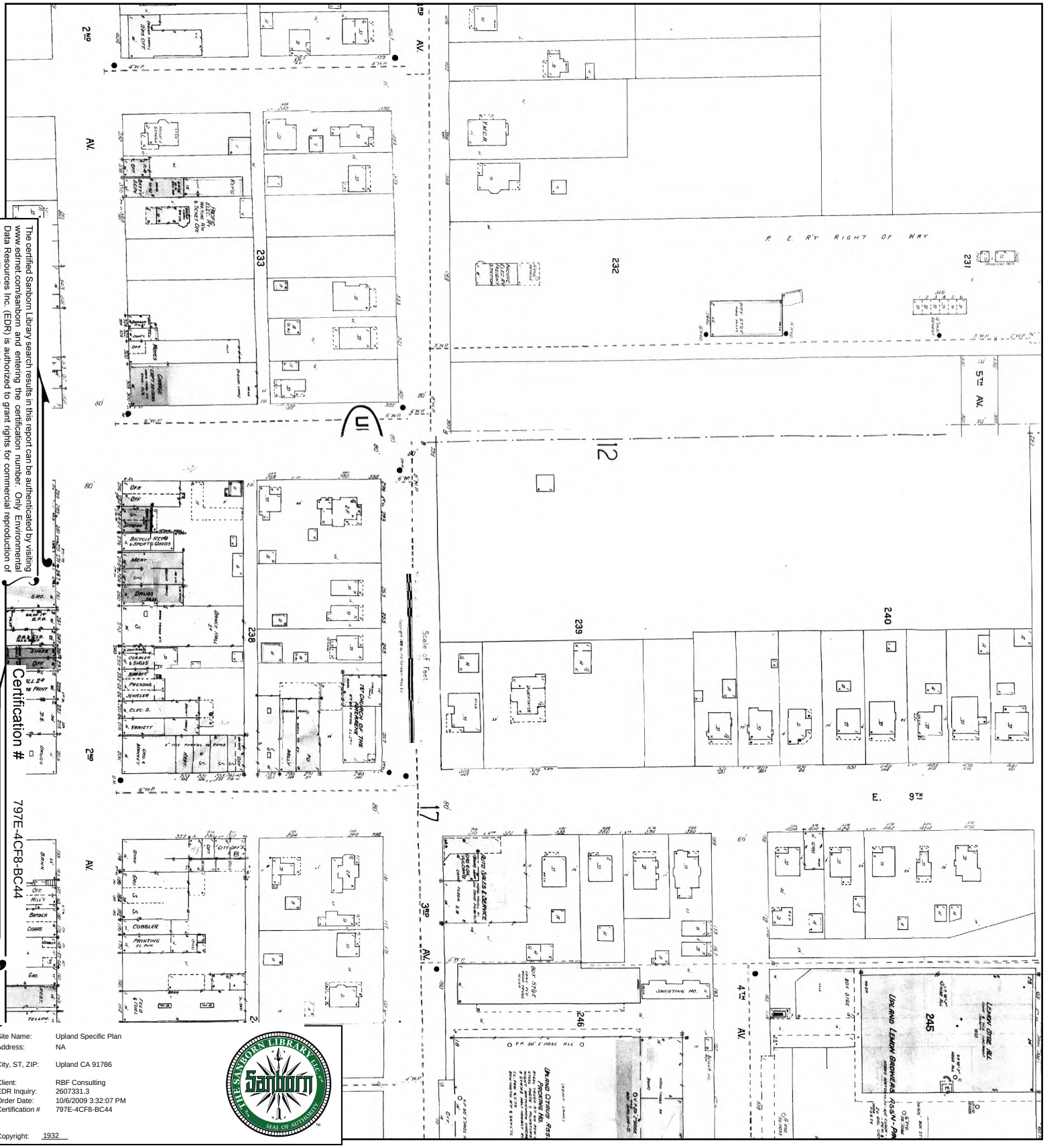
1932 Certified Sanborn Map



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Certification # 797E-4CF8-BC44

Site Name: Upland Specific Plan
Address: NA
City, ST, ZIP: Upland CA 91786

Client: RBF Consulting
EDR Inquiry: 2607331.3
Order Date: 10/6/2009 3:32:07 PM
Certification # 797E-4CF8-BC44

Copyright: 1932

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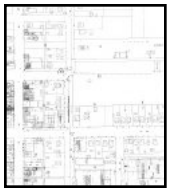

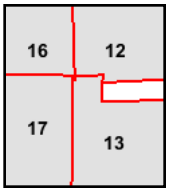

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Certification # 797E-4CF8-BC44

Site Name: Upland Specific Plan
Address: NA
City, ST, ZIP: Upland CA 91786

Client: RBF Consulting
EDR Inquiry: 2607331.3
Order Date: 10/6/2009 3:32:07 PM
Certification # 797E-4CF8-BC44

Copyright: 1930

This Certified Sanborn Map combines the following sheets (thumbnails on page 3).

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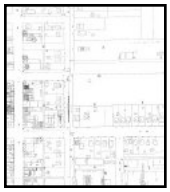

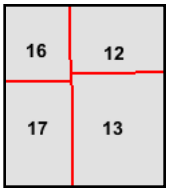

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1928 Certified Sanborn Map

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Certification # 797E-4CF8-BC44

Site Name: Upland Specific Plan
Address: NA
City, ST, ZIP: Upland CA 91786

Client: RBF Consulting
EDR Inquiry: 2607331.3
Order Date: 10/6/2009 3:32:07 PM
Certification # 797E-4CF8-BC44

Copyright: 1928

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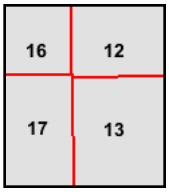

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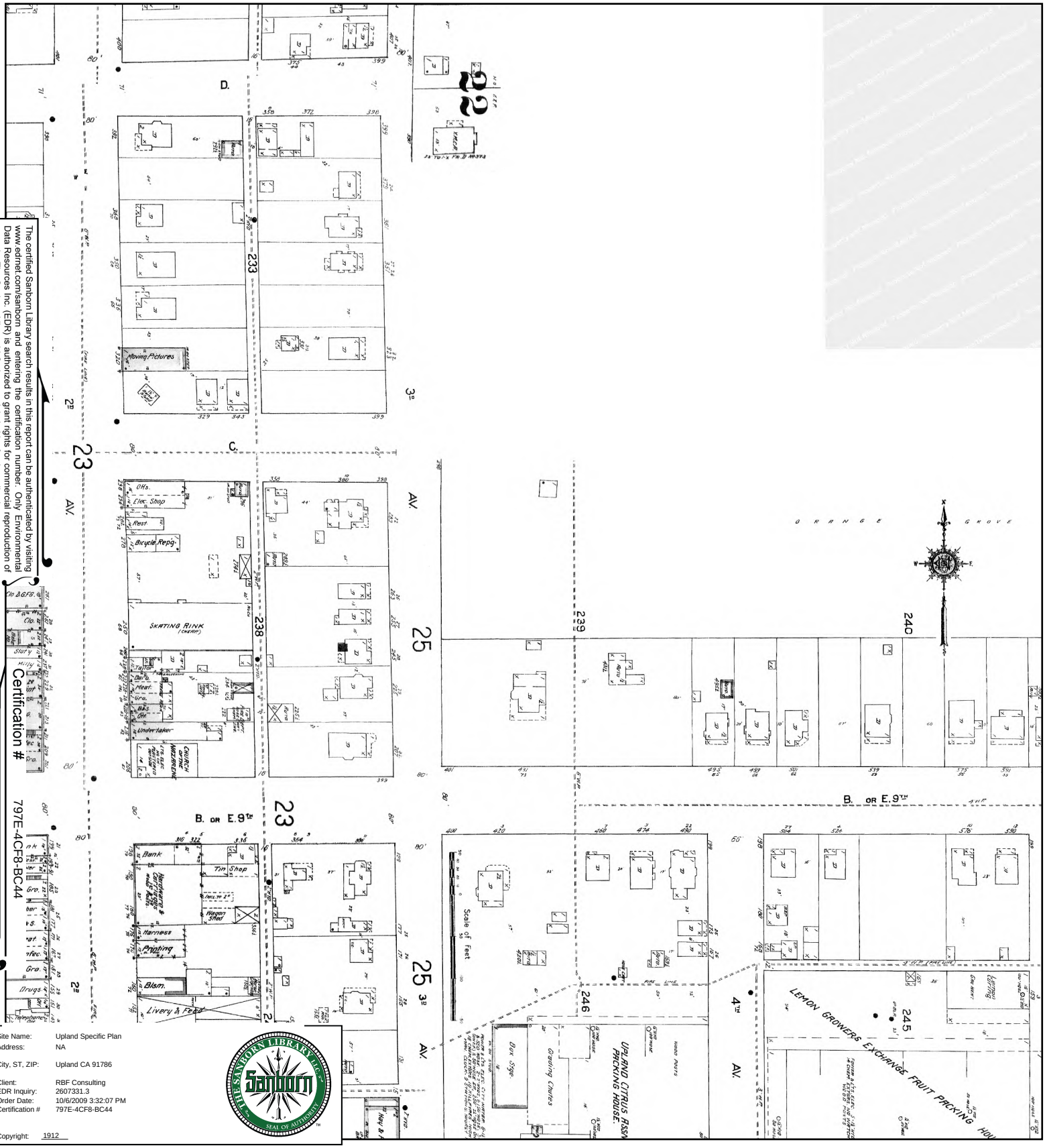
1912 Certified Sanborn Map



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Certification # 797E-4CF8-BC44

Site Name:	Upland Specific Plan
Address:	NA
City, ST, ZIP:	Upland CA 91786
Client:	RBF Consulting
EDR Inquiry:	2607331.3
Order Date:	10/6/2009 3:32:07 PM
Certification #	797E-4CF8-BC44

Copyright: 1912

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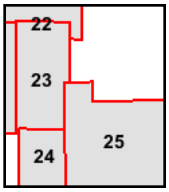

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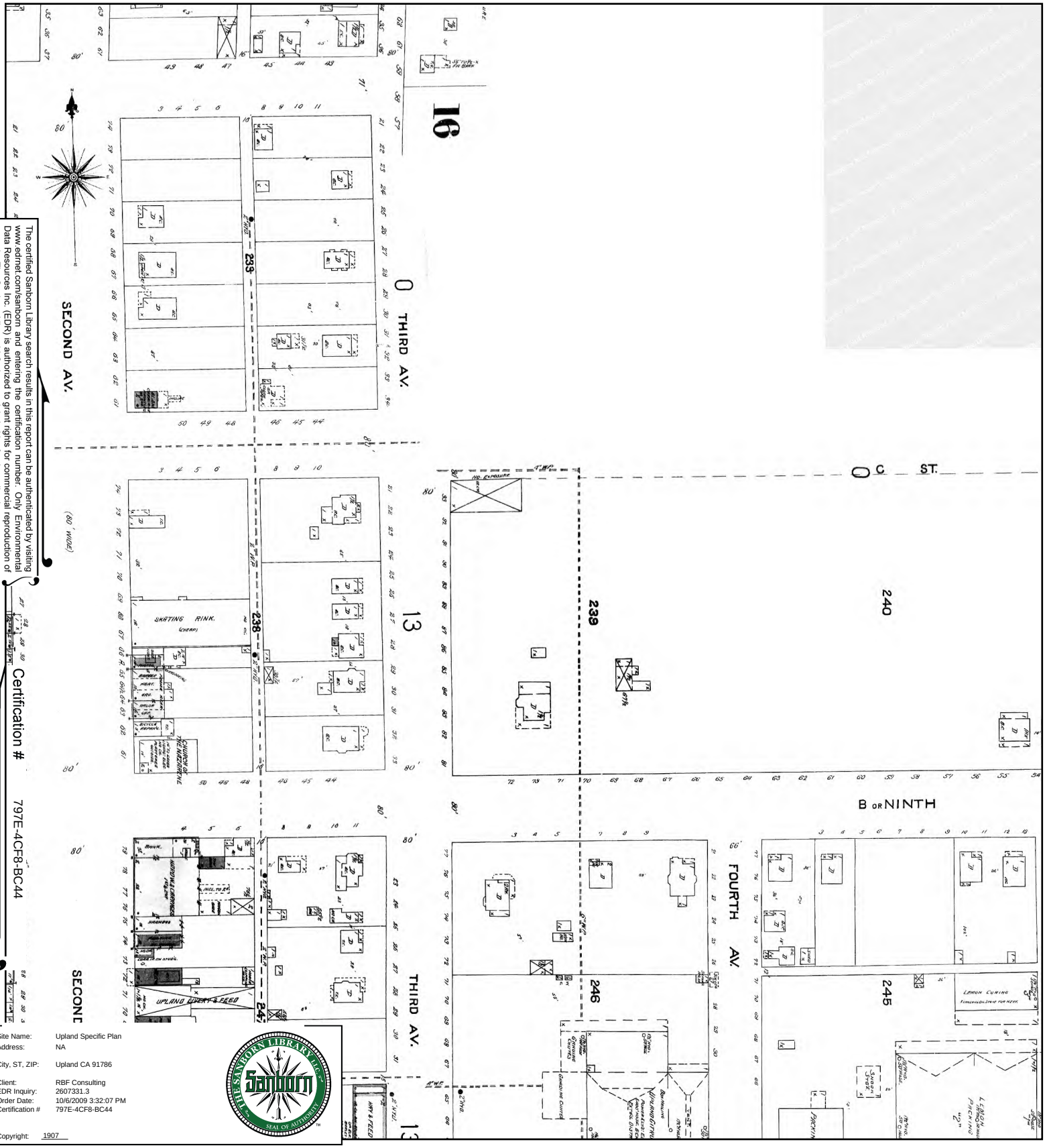
1907 Certified Sanborn Map



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Certification # 797E-4CF8-BC44

Site Name: Upland Specific Plan
Address: NA
City, ST, ZIP: Upland CA 91786

Client: RBF Consulting
EDR Inquiry: 2607331.3
Order Date: 10/6/2009 3:32:07 PM
Certification # 797E-4CF8-BC44

Copyright: 1907

This Certified Sanborn Map combines the following sheets (thumbnails on page 3).

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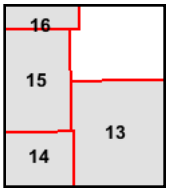

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Volume 1, Sheet 15
Volume 1, Sheet 16

N

REGIONAL WILDCAT MAP

SHOWING WELLS NOT ON DIVISION FIELD MAPS

State of California - Department of Conservation

Division of Oil, Gas, and Geothermal Resources

NOTE: Wells with directional surveys on file with the division are indicated with a short line under the well symbol.
Current well status should be confirmed at the appropriate division office.

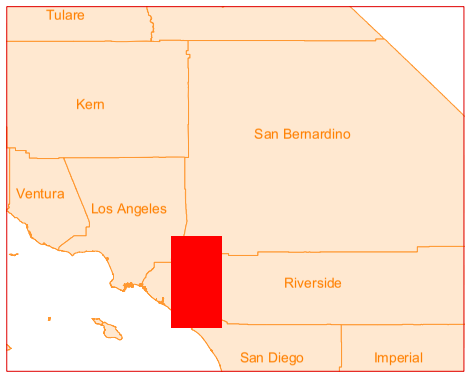
The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

LEGEND

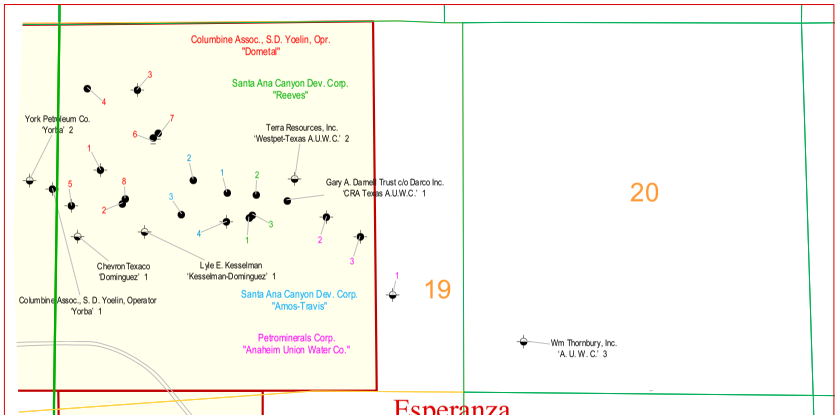
- Drilling
- Drilling - idle
- Plugged and abandoned - dry hole
- Completed - oil
- Idle - oil
- Plugged and abandoned - oil
- Completed - gas
- Idle - gas
- Plugged and abandoned - gas
- Completed - water disposal
- Completed - waterflood
- Idle - observation
- Oil - converted to water disposal
- Completed - gas injection
- Buried idle
- Abandoned - conductor
- Gas injection
- Gas - open to oil zone
- Water source
- Plugged & abandoned - oil & gas
- Gas storage
- Observation
- Gas - converted to gas storage
- Abandoned oil - converted to water disposal
- Oil - converted to air storage
- Plugged and abandoned - waterflood
- Plugged and abandoned - oil to waterflood
- Idle - dual completion - producing oil and disposal
- Field map boundary
- Field boundary

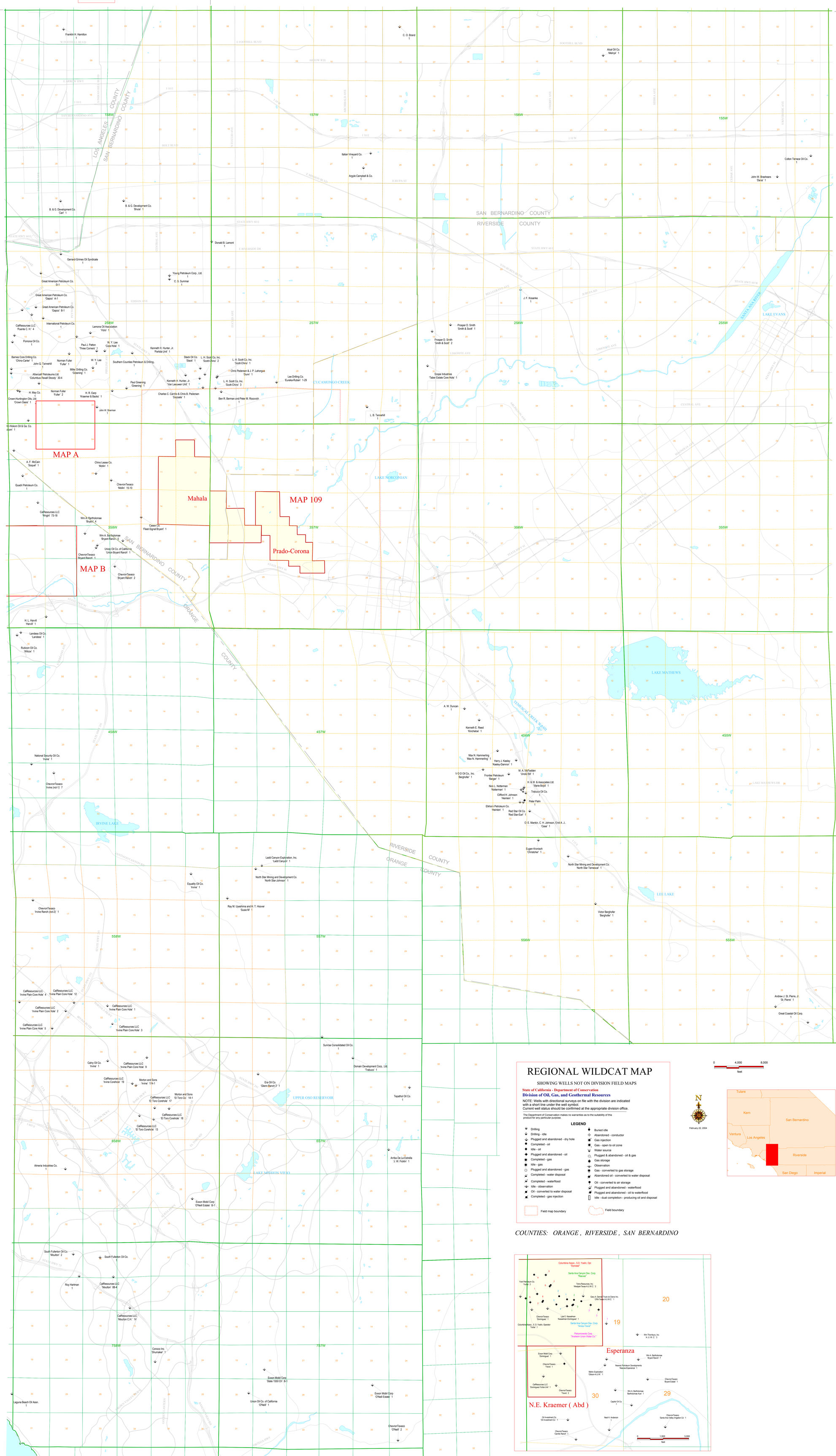
0 4,000 8,000
feet

February 22, 2004



COUNTIES: ORANGE , RIVERSIDE , SAN BERNARDINO





W 1 - 6

REGIONAL WILDCAT MAP

SHOWING WELLS NOT ON DIVISION FIELD MAPS

State of California - Department of Conservation

Division of Oil, Gas, and Geothermal Resources

NOTE: Wells with directional surveys on file with the division are indicated with a short line under the well symbol.
Current well status should be confirmed at the appropriate division office.

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LEGEND

- Drilling
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- Plugged and abandoned - dry hole
- Completed - oil
- Idle - oil
- Plugged and abandoned - oil
- Completed - gas
- Idle - gas
- Plugged and abandoned - gas
- Completed - water disposal
- Completed - waterflood
- Idle - observation
- Oil - converted to water disposal
- Completed - gas injection
- Buried idle
- Abandoned - conductor
- Gas injection
- Gas - open to oil zone
- Water source
- Plugged & abandoned - oil & gas
- Gas storage
- Observation
- Gas - converted to gas storage
- Abandoned oil - converted to water disposal
- Oil - converted to air storage
- Plugged and abandoned - waterflood
- Plugged and abandoned - oil to waterflood
- Idle - dual completion - producing oil and disposal
- Field map boundary
- Field boundary

0 4,000 8,000 feet

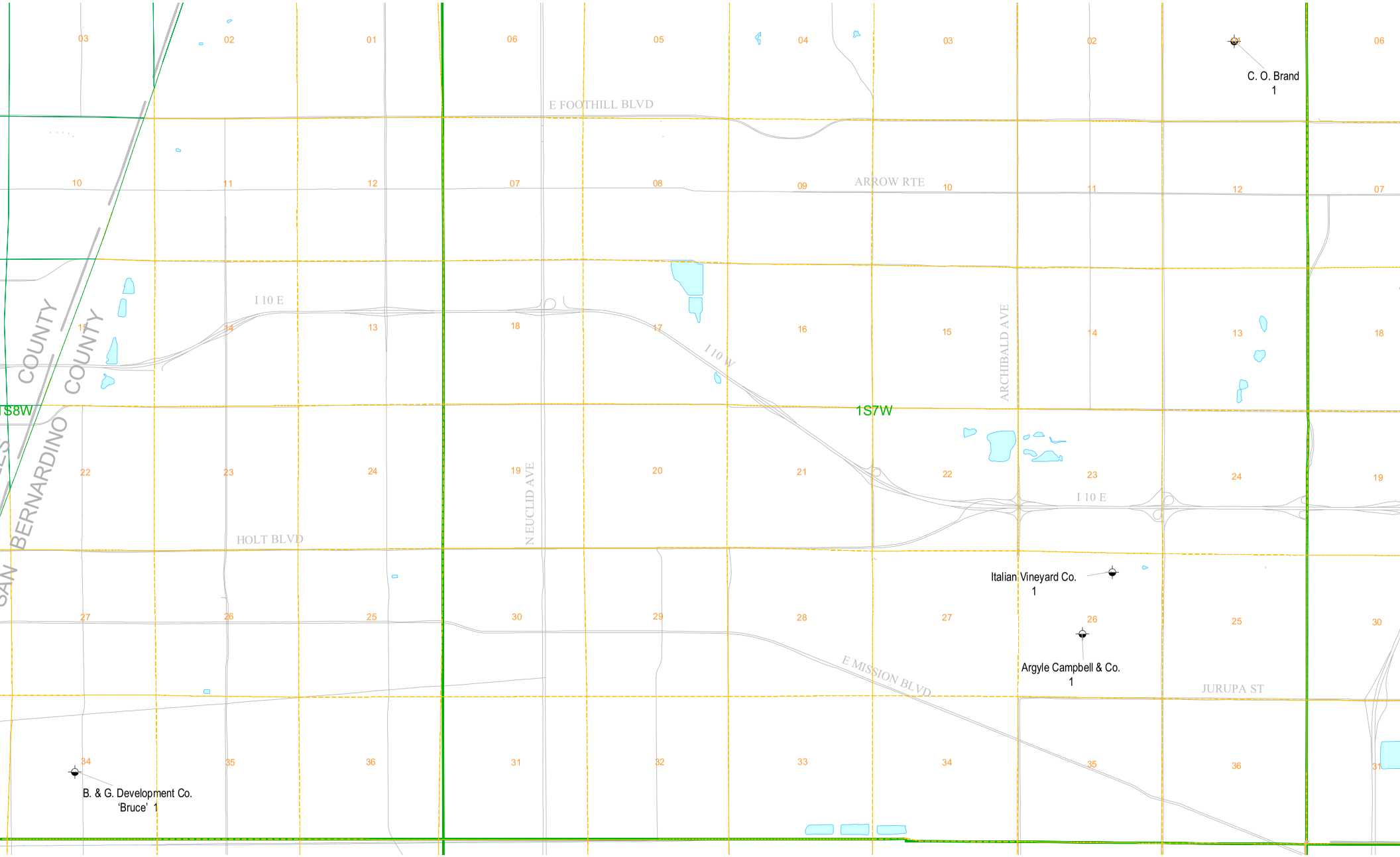
N

February 22, 2004

COUNTIES: ORANGE , RIVERSIDE , SAN BERNARDINO

MAP B: ESPERANZA

MAP A: CHINO- SOQUEL


E FOOTHILL BLVD
ARROW RTE
I 10 E
I 10 W
ARCHIBALD AVE
N EUCLID AVE
HOLT BLVD
E MISSION BLVD
JURUPA ST
SAN BERNARDINO COUNTY
COUNTY
1S8W
1S7W
C. O. Brand
1
Italian Vineyard Co.
1
Argyle Campbell & Co.
1
B. & G. Development Co.
'Bruce' 1

Upland Specific Plan
NA
Upland, CA 91786

Inquiry Number: 2607331.6
October 06, 2009

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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2009 Enhancements to EDR City Directory Abstract

New for 2009, the EDR City Directory Abstract has been enhanced with additional information and features. These enhancements will make your city directory research process more efficient, flexible, and insightful than ever before. The enhancements will improve the options for selecting adjoining properties, and will speed up your review of the report.

City Directory Report. Three important enhancements have been made to the EDR City Directory Abstract:

1. *Executive Summary.* The report begins with an Executive Summary that lists the sources consulted in the preparation of the report. Where available, a parcel map is also provided within the report, showing the locations of properties researched.

2. *Page Images.* Where available, the actual page source images will be included in the Appendix, so that you can review them for information that may provide additional insight. EDR has copyright permission to include these images.

3. *Findings Listed by Location.* Another useful enhancement is that findings are now grouped by address. This will significantly reduce the time you need to review your abstracts. Findings are provided under each property address, listed in reverse chronological order and referencing the source for each entry.

Options for Selecting Adjoining Properties. Ensuring that the right adjoining property addresses are searched is one of the biggest challenges that environmental professionals face when conducting city directory historical research. EDR's new enhancements make it easier for you to meet this challenge. Now, when you place an order for the EDR City Directory Abstract, you have the following choices for determining which addresses should be researched.

1. *You Select Addresses and EDR Selects Addresses.* Use the "Add Another Address" feature to specify the addresses you want researched. Your selections will be supplemented by addresses selected by EDR researchers using our established research methods. Where available, a digital map will be shown, indicating property lines overlaid on a color aerial photo and their corresponding addresses. Simply use the address list below the map to check off which properties shown on the map you want to include. You may also select other addresses using the "Add Another Address" feature at the bottom of the list.

2. *EDR Selects Addresses.* Choose this method if you want EDR's researchers to select the addresses to be researched for you, using our established research methods.

3. *You Select Addresses.* Use this method for research based solely on the addresses you select or enter into the system.

4. *Hold City Directory Research Option.* If you choose to select your own adjoining addresses, you may pause production of your EDR City Directory Abstract report until you have had a chance to look at your other EDR reports and sources. Sources for property addresses include: your Certified Sanborn Map Report may show you the location of property addresses; the new EDR Property Tax Map Report may show the location of property addresses; and your field research can supplement these sources with additional address information. To use this capability, simply click "Hold City Directory research" box under "Other Options" at the bottom of the page. Once you have determined what addresses you want researched, go to your EDR Order Status page, select the EDR City Directory Abstract, and enter the addresses and submit for production.

Questions? Contact your EDR representative at 800-352-0050. For more information about all of EDR's 2009 report and service enhancements, visit www.edrnet.com/2009enhancements

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2003. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2003	Haines & Co Publishers	-	X	X	-
2002	SBC PACIFIC BELL	-	-	-	-
1996	GTE Street Address Directory	-	-	-	-
1995	GTE Directories	-	X	X	-
1991	GTE California Incorporated	-	X	X	-
1990	GTE	-	X	X	-
1985	GTE	-	X	X	-
1981	General Telephone Company of California	-	-	-	-
1980	GTE General Telephone Company of California	-	X	X	-
1975	Pacific Telephone Co	-	X	X	-
1970	General Telephone Company of California	-	X	X	-
1965	General Telephone Company of California	-	X	X	-
1964	Luskey Brothers & Co	-	X	X	-
1961	Luskey Brothers& Co Publishers	-	-	-	-
1960	General Telephone Company Publishers	-	X	X	-
1956	General Telephone Company Publishers	-	X	X	-
1955	Luskey Brothers& Co Publishers	-	X	X	-
1951	Los Angeles Directory Company Publishers	-	X	X	-
1950	The Pacific Telephone and Telegraph Co	-	-	-	-
1949	San Bernardino Directory Co. Publishers	-	X	X	-
1946	Los Angeles Directory Company Publishers	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1945	Southern California Telephone Company	-	X	X	-
1942	San Bernardino Directory Co Publisher	-	-	-	-
1941	Associated Telephone Company Limited	-	-	-	-
1940	Los Angeles Directory Co.	-	X	X	-
1938	Los Angeles Directory Co.	-	X	X	-
1936	San Bernardino Directory Co Publisher	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Company Publishers	-	X	X	-
1930	San Bernardino Directory Co.	-	X	X	-
1926	Los Angeles Directory Co.	-	X	X	-
	SBC PACIFIC BELL	-	X	X	-
1923	Los Angeles Directory Company	-	X	X	-
1922	R.L. Polk & Co Publishers	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

NA
Upland, CA 91786

FINDINGS DETAIL

Target Property research detail.

No Addresses Found

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

2ND N

156 2ND N

Year	Uses	Source
1930	Ivey J R	San Bernardino Directory Co.

158 2ND N

Year	Uses	Source
1930	Vacant	San Bernardino Directory Co.

2ND AVE

163 2ND AVE

Year	Uses	Source
2003	FGRANADOS Ramnona	Haines & Co Publishers

166 2ND AVE

Year	Uses	Source
2003	AUTOMOTIVE	Haines & Co Publishers
	DONVEVERKA	Haines & Co Publishers

171 2ND AVE

Year	Uses	Source
2003	9 WOOD Sleve	Haines & Co Publishers

174 2ND AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

175 2ND AVE

Year	Uses	Source
2003	JOHNSON George	Haines & Co Publishers

180 2ND AVE

Year	Uses	Source
2003	C ERASCarey	Haines & Co Publishers

FINDINGS

185 2ND AVE

Year	Uses	Source
2003	HUTTER Thomnas	Haines & Co Publishers

188 2ND AVE

Year	Uses	Source
2003	WACHTELAlbet	Haines & Co Publishers

190 2ND AVE

Year	Uses	Source
2003	BROOKSSteven	Haines & Co Publishers

197 2ND AVE

Year	Uses	Source
2003	X 8TH	Haines & Co Publishers
	MARKET	Haines & Co Publishers
	$ONr IS 2 NDAVENUE 59 942 232 S	Haines & Co Publishers

205 2ND AVE

Year	Uses	Source
2003	INIQI JEZFracaico	Haines & Co Publishers

217 2ND AVE

Year	Uses	Source
2003	JIMINE 7 Carol	Haines & Co Publishers

218 2ND AVE

Year	Uses	Source
2003	OLEASON Lwa	Haines & Co Publishers

224 2ND AVE

Year	Uses	Source
2003	FLORES Richard 00 a	Haines & Co Publishers

225 2ND AVE

Year	Uses	Source
2003	OLVO Estella	Haines & Co Publishers
	DEDIOS Monica 909 579 0 B	Haines & Co Publishers

234 2ND AVE

Year	Uses	Source
2003	OGELLA Val 00 Q	Haines & Co Publishers

FINDINGS

235 2ND AVE

Year	Uses	Source
2003	PEDREGOAmoldo 00 a	Haines & Co Publishers

240 2ND AVE

Year	Uses	Source
2003	ROBERTSON Janey	Haines & Co Publishers

241 2ND AVE

Year	Uses	Source
2003	BEGGS Loren	Haines & Co Publishers

243 2ND AVE

Year	Uses	Source
2003	HERNANDEZF	Haines & Co Publishers

244 2ND AVE

Year	Uses	Source
2003	CERVANTEZF	Haines & Co Publishers

254 2ND AVE

Year	Uses	Source
2003	THOMAS Calvin L	Haines & Co Publishers

257 2ND AVE

Year	Uses	Source
2003	BROOKS Deemat 00 C	Haines & Co Publishers

260 2ND AVE

Year	Uses	Source
2003	REED Calvin	Haines & Co Publishers

267 2ND AVE

Year	Uses	Source
2003	MILLER Ralph V	Haines & Co Publishers

268 2ND AVE

Year	Uses	Source
2003	OBUFLER Claude	Haines & Co Publishers

275 2ND AVE

Year	Uses	Source
2003	BAf BARIA H 909 B	Haines & Co Publishers

FINDINGS

Year	Uses	Source
2003	CARR Lobby	Haines & Co Publishers
	PLANTE Robert	Haines & Co Publishers

285 2ND AVE

Year	Uses	Source
2003	FILLINGER Georgoe	Haines & Co Publishers

294 2ND AVE

Year	Uses	Source
2003	SERRANOJose OO	Haines & Co Publishers

295 2ND AVE

Year	Uses	Source
2003	ALLENWD	Haines & Co Publishers
	X OLIVE E	Haines & Co Publishers

305 2ND AVE

Year	Uses	Source
2003	PFAU Raymond 00 a	Haines & Co Publishers

306 2ND AVE

Year	Uses	Source
2003	BOKATH Tim	Haines & Co Publishers

312 2ND AVE

Year	Uses	Source
2003	KELLYKelly Q	Haines & Co Publishers

313 2ND AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

322 2ND AVE

Year	Uses	Source
2003	WALKERThos	Haines & Co Publishers

323 2ND AVE

Year	Uses	Source
2003	JARVIS W Glenn	Haines & Co Publishers

FINDINGS

329 2ND AVE

Year	*Uses*	*Source*
2003	WLSON Debra	Haines & Co Publishers

330 2ND AVE

Year	*Uses*	*Source*
2003	CUESTA Eugene	Haines & Co Publishers

333 2ND AVE

Year	*Uses*	*Source*
2003	PADILLA Jose	Haines & Co Publishers

338 2ND AVE

Year	*Uses*	*Source*
2003	$11 SCQ George	Haines & Co Publishers

345 2ND AVE

Year	*Uses*	*Source*
2003	MAYBURY Linda	Haines & Co Publishers

346 2ND AVE

Year	*Uses*	*Source*
2003	WEAVER John	Haines & Co Publishers

351 2ND AVE

Year	*Uses*	*Source*
2003	WELLS Encr J	Haines & Co Publishers

354 2ND AVE

Year	*Uses*	*Source*
2003	HERNANDEZArmando	Haines & Co Publishers

363 2ND AVE

Year	*Uses*	*Source*
2003	OOSWALT Chris	Haines & Co Publishers

364 2ND AVE

Year	*Uses*	*Source*
2003	JOHNSON Joyce	Haines & Co Publishers

371 2ND AVE

Year	*Uses*	*Source*
2003	FIRLE Krily	Haines & Co Publishers

FINDINGS

372 2ND AVE

Year	Uses	Source
2003	OBARK Carml	Haines & Co Publishers

380 2ND AVE

Year	Uses	Source
2003	JAUREGUY Frank 098 Ba	Haines & Co Publishers

381 2ND AVE

Year	Uses	Source
2003	VASQUE 2 Antonio	Haines & Co Publishers
	7TH E	Haines & Co Publishers

384 2ND AVE

Year	Uses	Source
2003	X STOWELL E	Haines & Co Publishers
	WEALTH CODE S	Haines & Co Publishers

2ND AVE N

205 2ND AVE N

Year	Uses	Source
1970	OHARRIS PHARMACY	General Telephone Company of California

215 2ND AVE N

Year	Uses	Source
1970	n ATWOOD CO J J	General Telephone Company of California

216 2ND AVE N

Year	Uses	Source
1970	a FASHION FABRICS	General Telephone Company of California
	n TROLLEY STOP	General Telephone Company of California

220 2ND AVE N

Year	Uses	Source
1970	DDAVIS JEWELERS	General Telephone Company of California

228 2ND AVE N

Year	Uses	Source
1970	DONUT SHOP THE	General Telephone Company of California

FINDINGS

229 2ND AVE N

Year	Uses	Source
1970	OWSTRN AUTO ASSOC ST	General Telephone Company of California
	OICOF HALL	General Telephone Company of California

232 2ND AVE N

Year	Uses	Source
1970	u DOUBLE EAGLE	General Telephone Company of California

237 2ND AVE N

Year	Uses	Source
1970	o BETTYS BEAUTY SHOP	General Telephone Company of California

241 2ND AVE N

Year	Uses	Source
1970	a DIERS SHOES	General Telephone Company of California

247 2ND AVE N

Year	Uses	Source
1970	UPLAND TRAVEL BUREAU	General Telephone Company of California

251 2ND AVE N

Year	Uses	Source
1970	UPLAND GLASS CO	General Telephone Company of California
	n UPLANO GLASS CO	General Telephone Company of California

260 2ND AVE N

Year	Uses	Source
1970	HOUSE OF ACCENTS	General Telephone Company of California

261 2ND AVE N

Year	Uses	Source
1970	SCOTTS JEWELERS	General Telephone Company of California

263 2ND AVE N

Year	Uses	Source
1970	OALADDINS FLORIST	General Telephone Company of California

267 2ND AVE N

Year	Uses	Source
1970	UPLANO PAINT/HRDWRE	General Telephone Company of California

FINDINGS

271 2ND AVE N

Year	Uses	Source
1970	OMONAS DRESS SHOP	General Telephone Company of California

279 2ND AVE N

Year	Uses	Source
1970	APARTMENT	General Telephone Company of California

280 2ND AVE N

Year	Uses	Source
1970	OLLSEN E	General Telephone Company of California

282 2ND AVE N

Year	Uses	Source
1970	COMMUNITY REALTY	General Telephone Company of California

284 2ND AVE N

Year	Uses	Source
1970	OHOUSE/BEAUTY	General Telephone Company of California

289 2ND AVE N

Year	Uses	Source
1970	APARTMENT	General Telephone Company of California

296 2ND AVE N

Year	Uses	Source
1970	UPLANO PHARMACY	General Telephone Company of California

299 2ND AVE N

Year	Uses	Source
1970	c CAGLES FURNITURE	General Telephone Company of California

305 2ND AVE N

Year	Uses	Source
1970	ORALPH SPORTNG GOODS	General Telephone Company of California

308 2ND AVE N

Year	Uses	Source
1970	OBANK/AMER N T C S	General Telephone Company of California

313 2ND AVE N

Year	Uses	Source
1970	PORTER RONALD RL EST	General Telephone Company of California

FINDINGS

325 2ND AVE N

Year	Uses	Source
1970	a THRALL REARDON/CO CP	General Telephone Company of California
	D o DUNGAN ATTY R L	General Telephone Company of California
	o BARMAKIAN NORMAN	General Telephone Company of California
	F OBALFOUR CO L G	General Telephone Company of California
	BUILDING	General Telephone Company of California

337 2ND AVE N

Year	Uses	Source
1970	OHARVEYS PAINT STORE	General Telephone Company of California

343 2ND AVE N

Year	Uses	Source
1970	o CHRISTIAN BOOK STR	General Telephone Company of California

376 2ND AVE N

Year	Uses	Source
1970	MITCHELL A T/SON INC	General Telephone Company of California

378 2ND AVE N

Year	Uses	Source
1970	MATHER THORNE C MOG	General Telephone Company of California

387 2ND AVE N

Year	Uses	Source
1970	EMPIRE CO	General Telephone Company of California

3RD N

125 3RD N

Year	Uses	Source
1930	Burrill A L	San Bernardino Directory Co.

145 3RD N

Year	Uses	Source
1930	Rock Earnest	San Bernardino Directory Co.

155 3RD N

Year	Uses	Source
1930	Vacant	San Bernardino Directory Co.

FINDINGS

156 3RD N

Year	Uses	Source
1930	Simonds F C	San Bernardino Directory Co.

3RD AVE

177 3RD AVE

Year	Uses	Source
1926	Maxwell S G	SBC PACIFIC BELL

191 3RD AVE

Year	Uses	Source
1931	Denton Ruth	Los Angeles Directory Company Publishers
	Denton Minnie Mrs	Los Angeles Directory Company Publishers

3RD AVE N

283 3RD AVE N

Year	Uses	Source
1985	APARTMENT A BRAMLETT MARTH	GTE

321 3RD AVE N

Year	Uses	Source
1985	B e GRAUE GEO H DOS INC	GTE
	C c ELISTIC CERAMICS	GTE
	CLELAND THOS E	GTE
	BUILDING	GTE

409 3RD AVE N

Year	Uses	Source
1985	EATON LEON	GTE

416 3RD AVE N

Year	Uses	Source
1985	APARTMENT B LAPP EDW H	GTE

419 3RD AVE N

Year	Uses	Source
1985	UPLAND PSYCHOTHERAPY	GTE
	POSTMAN PHD ROBT J	GTE

FINDINGS

4TH N

126 4TH N

Year	Uses	Source
1930	Jacobson J H	San Bernardino Directory Co.

131 4TH N

Year	Uses	Source
1930	Vacant	San Bernardino Directory Co.

140 4TH N

Year	Uses	Source
1930	Smith C A	San Bernardino Directory Co.

155 4TH N

Year	Uses	Source
1930	Ellery W R	San Bernardino Directory Co.

156 4TH N

Year	Uses	Source
1930	Vacant	San Bernardino Directory Co.

4TH AVE

167 4TH AVE

Year	Uses	Source
1931	Collyer Wm H fruitwkr	Los Angeles Directory Company Publishers
	Collier Evelyn	Los Angeles Directory Company Publishers
1926	Steinberg H Miollie	SBC PACIFIC BELL
1923	Barry Asbury Sarah E carp	Los Angeles Directory Company

173 4TH AVE

Year	Uses	Source
1931	Meyer Henry Lottie fruit wkr	Los Angeles Directory Company Publishers
1926	Corman Gertrude bkpr	SBC PACIFIC BELL
1923	Collings Fred Jennie pntr	Los Angeles Directory Company

180 4TH AVE

Year	Uses	Source
1931	Bamett Pearl Mrs	Los Angeles Directory Company Publishers
	Barnett Della fruit pkr	Los Angeles Directory Company Publishers
1926	Borja Manuel Rosa gro	SBC PACIFIC BELL

Year	Uses	Source
1926	Obreros Favian	SBC PACIFIC BELL
1923	Stephens Clarence 0 Hazel asst agt P E Ry and American Ry Exp	Los Angeles Directory Company

C ST

170 C ST

Year	Uses	Source
1980	APARTMENT	GTE General Telephone Company of California

201 C ST

Year	Uses	Source
1980	v UPLAND HOME LOANS	GTE General Telephone Company of California

202 C ST

Year	Uses	Source
1980	CLEAVELIN ADVERTISNG	GTE General Telephone Company of California
	SENNE STEPHEN M	GTE General Telephone Company of California
	o CHURCH ADVERTISING	GTE General Telephone Company of California
	JD ASSOCIATES INC	GTE General Telephone Company of California

203 C ST

Year	Uses	Source
1980	+INVESTORS DIVERSIFD	GTE General Telephone Company of California

207 C ST

Year	Uses	Source
1980	o SECURTY PAC NATL BNK	GTE General Telephone Company of California

208 C ST

Year	Uses	Source
1980	R B ENTERPRISES	GTE General Telephone Company of California

FINDINGS

352 C ST

Year	Uses	Source
1980	P A L	GTE General Telephone Company of California
	STEELWORKERS OLDTMRS	GTE General Telephone Company of California

372 C ST

Year	Uses	Source
1980	OSOCIAL DANCE STUDIO	GTE General Telephone Company of California

384 C ST

Year	Uses	Source
1980	BUS/PROFSSNL SVC INC	GTE General Telephone Company of California

386 C ST

Year	Uses	Source
1980	a UPLAND TEACHERS ASSN	GTE General Telephone Company of California

390 C ST

Year	Uses	Source
1980	A G TAX SERVICE	GTE General Telephone Company of California

392 C ST

Year	Uses	Source
1980	CLEOPATRA HAIR DSGNS	GTE General Telephone Company of California

394 C ST

Year	Uses	Source
1980	CUSTOM JEWELRY	GTE General Telephone Company of California

398 C ST

Year	Uses	Source
1980	BUCKEYE GAS PRODUCTS	GTE General Telephone Company of California

402 C ST

Year	Uses	Source
1980	GEORGES FLOWER SHOP	GTE General Telephone Company of California

Year	Uses	Source
1980	ABODE LANDSCPE DESGN	GTE General Telephone Company of California

455 C ST

Year	Uses	Source
1980	w FOOTHILL AUTO REPAIR	GTE General Telephone Company of California

D

258 D

Year	Uses	Source
2003	TRUJILLO Adolph G	Haines & Co Publishers
	FINLEY Sarah	Haines & Co Publishers

267 D

Year	Uses	Source
2003	FANT DONALD 0 CPA	Haines & Co Publishers

291 D

Year	Uses	Source
2003	X 3 RDAVN	Haines & Co Publishers
	TAFOYA Robed	Haines & Co Publishers

330 D

Year	Uses	Source
2003	WONG Song	Haines & Co Publishers

350 D

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

369 D

Year	Uses	Source
2003	OHECTOR Oswald	Haines & Co Publishers

371 D

Year	Uses	Source
2003	FOOS Rila	Haines & Co Publishers

FINDINGS

372 D

Year	*Uses*	*Source*
2003	LEWIS Megan	Haines & Co Publishers
	FORD Ronald	Haines & Co Publishers

373 D

Year	*Uses*	*Source*
2003	GALLEGOS Frederick	Haines & Co Publishers

374 D

Year	*Uses*	*Source*
2003	KIM Chung	Haines & Co Publishers

376 D

Year	*Uses*	*Source*
2003	HUSSAIN Mirza	Haines & Co Publishers

390 D

Year	*Uses*	*Source*
2003	DEAN Dorothy	Haines & Co Publishers

391 D

Year	*Uses*	*Source*
2003	RUCKMAN Joan	Haines & Co Publishers

392 D

Year	*Uses*	*Source*
2003	PEREZ Lupe	Haines & Co Publishers

393 D

Year	*Uses*	*Source*
2003	e BEEMAN Eddie	Haines & Co Publishers

394 D

Year	*Uses*	*Source*
2003	RYANTim	Haines & Co Publishers

395 D

Year	*Uses*	*Source*
2003	WATKINS Bond	Haines & Co Publishers

FINDINGS

396 D

Year	Uses	Source
2003	OSCHUBEL Craig	Haines & Co Publishers

397 D

Year	Uses	Source
2003	STRAUSS Artie	Haines & Co Publishers

399 D

Year	Uses	Source
1955	Sn B Evening Telegram	Luskey Brothers& Co Publishers
	Sun Co The of Sn B	Luskey Brothers& Co Publishers
	Sn B Daily Sun	Luskey Brothers& Co Publishers
	Sun Telegram	Luskey Brothers& Co Publishers

410 D

Year	Uses	Source
2003	FORNELLI Jose	Haines & Co Publishers

414 D

Year	Uses	Source
2003	LOPEZThomas	Haines & Co Publishers

415 D

Year	Uses	Source
2003	MILLER Ronald	Haines & Co Publishers

416 D

Year	Uses	Source
2003	SORENSEN Elizabelh	Haines & Co Publishers

417 D

Year	Uses	Source
2003	CHARUGUNDLAKesava	Haines & Co Publishers

419 D

Year	Uses	Source
2003	SAMUDRALA Rama	Haines & Co Publishers

421 D

Year	Uses	Source
2003	REED Patrick	Haines & Co Publishers

FINDINGS

430 D

Year	*Uses*	*Source*
2003	SMITH Esirella	Haines & Co Publishers

432 D

Year	*Uses*	*Source*
2003	DURAN Agnes	Haines & Co Publishers

434 D

Year	*Uses*	*Source*
2003	COX Mary	Haines & Co Publishers

436 D

Year	*Uses*	*Source*
2003	:THOMAS Nancy	Haines & Co Publishers

450 D

Year	*Uses*	*Source*
2003	WERHANEGilmore	Haines & Co Publishers

452 D

Year	*Uses*	*Source*
2003	RIVERA Victor	Haines & Co Publishers

454 D

Year	*Uses*	*Source*
2003	NICHOLS Cynthia	Haines & Co Publishers

456 D

Year	*Uses*	*Source*
2003	AYOUB Malaek	Haines & Co Publishers

D ST

267 D ST

Year	*Uses*	*Source*
1980	SMITH SPENCER R	GTE General Telephone Company of California

291 D ST

Year	*Uses*	*Source*
1980	JOHNSON L	GTE General Telephone Company of California

FINDINGS

399 D ST

Year	Uses	Source
1949	Sun Co of S B	San Bernardino Directory Co. Publishers
	Evening Telegram	San Bernardino Directory Co. Publishers
	S B Daily Sun	San Bernardino Directory Co. Publishers
	Sun Telegram	San Bernardino Directory Co. Publishers

450 D ST

Year	Uses	Source
1980	UPLAND ESTATES	GTE General Telephone Company of California

D ST N

399 D ST N

Year	Uses	Source
1965	SUN CO THE	General Telephone Company of California

E 9TH ST

158 E 9TH ST

Year	Uses	Source
1923	Owen Edna M	Los Angeles Directory Company
	Owen Mary wid J W	Los Angeles Directory Company

159 E 9TH ST

Year	Uses	Source
1931	Schleiter Geo H lab	Los Angeles Directory Company Publishers
	Cashionos Louis shoe shiner	Los Angeles Directory Company Publishers
	Van Home Fanny	Los Angeles Directory Company Publishers
	Van Home Wm G Alice R furn rms	Los Angeles Directory Company Publishers
	Van Home Wm L clk	Los Angeles Directory Company Publishers

172 E 9TH ST

Year	Uses	Source
1940	West End Consolidated Water Co Wm Springer pres Ella Draper sec	Los Angeles Directory Co.

175 E 9TH ST

Year	Uses	Source
1960	Machado N J	General Telephone Company Publishers
	Magnolia Apts	General Telephone Company Publishers

FINDINGS

176 E 9TH ST

Year	Uses	Source
1931	Hunter John A	Los Angeles Directory Company Publishers
	Hinshaw Eliz nurse	Los Angeles Directory Company Publishers
	Spicer Harriet Mirs fumn rms	Los Angeles Directory Company Publishers

177 E 9TH ST

Year	Uses	Source
1960	Palmer Kenneth I	General Telephone Company Publishers

179 E 9TH ST

Year	Uses	Source
1960	Reed Boyd M I	General Telephone Company Publishers

192 E 9TH ST

Year	Uses	Source
1960	Johnson Geo L I	General Telephone Company Publishers

204 E 9TH ST

Year	Uses	Source
1995	GOMEZ RAMON ATTORNEY	GTE Directories

208 E 9TH ST

Year	Uses	Source
1985	MIRAGE THE	GTE
1970	QBEST WESTERN REALTY	General Telephone Company of California

210 E 9TH ST

Year	Uses	Source
1931	Anderson Hjalmar Hilda gro	Los Angeles Directory Company Publishers

216 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1985	UPLAND SHOE REPAIR	GTE
1980	WEST END TOXIC ABUSE	GTE General Telephone Company of California

220 E 9TH ST

Year	Uses	Source
1980	SIEMS SUSAN	GTE General Telephone Company of California
1931	Seguin & Son G F and W G meats	Los Angeles Directory Company Publishers

Year	Uses	Source
1923	Danner Clyde C Arlan bakery	Los Angeles Directory Company

221 E 9TH ST

Year	Uses	Source
1931	Upland Inn W S Avery	Los Angeles Directory Company Publishers
	Avery Wm S Nettie L Upland Inn	Los Angeles Directory Company Publishers
1923	Upland Hotel W S Avery prop	Los Angeles Directory Company
	Avery Wm S Nettie L prop Upland Hotel	Los Angeles Directory Company

222 E 9TH ST

Year	Uses	Source
2003	LYNES Russell	Haines & Co Publishers
1995	GEORGE S UPLAND FLOWER	GTE Directories
1985	GEORGES UPLAND FLOWR	GTE
	PEGASUS LIMOUSNS LTD	GTE
1980	MAREK LILIAN	GTE General Telephone Company of California
	THE NAIL PARLOUR	GTE General Telephone Company of California
1960	Alexander W D Barber Shop	General Telephone Company Publishers

228 E 9TH ST

Year	Uses	Source
1980	JENNER KENNETH C	GTE General Telephone Company of California
1931	Danner Clyde C Arlene bakery	Los Angeles Directory Company Publishers

230 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1980	+RED HILL REALTY	GTE General Telephone Company of California
	HOMESTEAD REALTY	GTE General Telephone Company of California
1970	DJ A L TV SHOP	General Telephone Company of California
1940	Redmon G Thos Hazel R real est	Los Angeles Directory Co.
1931	Howe John D Roberta lemon grower office	Los Angeles Directory Company Publishers
1923	Naylor & Linkey H C Naylor D J Linkey meats	Los Angeles Directory Company

FINDINGS

231 E 9TH ST

Year	Uses	Source
2003	IRISSGIFTSHOPS	Haines & Co Publishers
1995	ALPHENAAR S ANTIQUES	GTE Directories
1985	LACE SHOPPE THE	GTE
1980	+HARRIS THOS D	GTE General Telephone Company of California
1940	Southern Counties Gas Co Gladys G Loney cash	Los Angeles Directory Co.

235 E 9TH ST

Year	Uses	Source
2003	STAMPING FOOLS	Haines & Co Publishers
1995	VCUTS & SUCH BY SANDY	GTE Directories
	CUTS & SUCH	GTE Directories
1985	BIRCHEFF LOU	GTE
1970	DLUCILLES BEAUTY SHO	General Telephone Company of California

236 E 9TH ST

Year	Uses	Source
1931	Swan Edna R Mrs music dir	Los Angeles Directory Company Publishers

240 E 9TH ST

Year	Uses	Source
2003	LYNES Russell	Haines & Co Publishers
1960	DUNNS RE WEAVE SHOP	General Telephone Company Publishers
1940	Terrill Beverly osteo	Los Angeles Directory Co.

242 E 9TH ST

Year	Uses	Source
1931	Manker & Benson Inc F H Manker pres C V Benson v pres paints	Los Angeles Directory Company Publishers
1923	Manker & Benson F H Manker Charles V Benson pntr	Los Angeles Directory Company

243 E 9TH ST

Year	Uses	Source
2003	PENTUM GROUP	Haines & Co Publishers
1995	COLLECTORS COTTAGE	GTE Directories

246 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

Year	Uses	Source
1980	UPLAND SHOE REPAIR	GTE General Telephone Company of California
1970	DUPLANO NEWS	General Telephone Company of California

247 E 9TH ST

Year	Uses	Source
2003	INSURANCE SERVICES	Haines & Co Publishers
	AGENCY	Haines & Co Publishers
1995	A & D CARPET& DESIGN	GTE Directories
1980	+o GLENN S CSTM UPHLSTY	GTE General Telephone Company of California
1960	JOES RADIO TV SERV	General Telephone Company Publishers

257 E 9TH ST

Year	Uses	Source
2003	ANTIQUE ALLEY	Haines & Co Publishers
1995	ANTIQUE ALLEY	GTE Directories
1985	ANTIQUE ALLEY	GTE
1980	ANTIQUE ALLEY	GTE General Telephone Company of California
1970	RAPID REPRODUCTIONS	General Telephone Company of California
1960	Upland News	General Telephone Company Publishers
1931	Culver Geo A Emma barber	Los Angeles Directory Company Publishers

258 E 9TH ST

Year	Uses	Source
2003	SERVICES INC	Haines & Co Publishers
	DEBT MEDIATION	Haines & Co Publishers
1995	EMPIRE CO	GTE Directories
1985	EMPIRE CO	GTE
1980	EMPIRE CO	GTE General Telephone Company of California
1970	HOUSE OF 1001 WIGS	General Telephone Company of California
1960	Dight Reardon E phys & surg DO	General Telephone Company Publishers
	Lee Wm phy & sur DO	General Telephone Company Publishers
1931	Thudium Gertrude mlnr	Los Angeles Directory Company Publishers

262 E 9TH ST

Year	Uses	Source
1931	Bryan Janet F beauty shop	Los Angeles Directory Company Publishers

FINDINGS

263 E 9TH ST

Year	Uses	Source
1931	Cortright L Grand H lone shoe repr	Los Angeles Directory Company Publishers
1923	Hawkey Bert Agnes agt Motor Transit C and confy	Los Angeles Directory Company
	Motor Transit Co Bert Hawkey agt	Los Angeles Directory Company

265 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1970	OPEARSON JEWELERS	General Telephone Company of California
1960	Pearson Jewelers	General Telephone Company Publishers
1940	Mellon F W Andy Venetta appliances	Los Angeles Directory Co.
	Pooler Chas A Myrtle elec contr	Los Angeles Directory Co.

267 E 9TH ST

Year	Uses	Source
1931	Meyers Marie M waiter	Los Angeles Directory Company Publishers
	Harnish Lily dry gds	Los Angeles Directory Company Publishers
	Magnolia Apts J B Ford	Los Angeles Directory Company Publishers
1923	Pacific Guano & Fertilizer Co	Los Angeles Directory Company
	Ruedy Charles Maude pres Citizens Land & Water Co and Magnolia Mutual Bldg & Loan Assn	Los Angeles Directory Company

270 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1970	GAGE BEAUTY SALON	General Telephone Company of California
1960	GAGE BEAUTY SALON	General Telephone Company Publishers

271 E 9TH ST

Year	Uses	Source
2003	UPLAND LAUNDRY THE	Haines & Co Publishers
1985	UPLND 1 HR DRY CLNRS	GTE
1980	NUPLND 1 HR DRY CLNRS	GTE General Telephone Company of California
1970	n UPLANO COIN LAUNDRY	General Telephone Company of California

272 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

FINDINGS

Year	Uses	Source
1995	DISCOUNT PLUS	GTE Directories
1985	BAUMANN B PHOTGRPHY	GTE
1980	BAUMANN B PHOTGRPHY	GTE General Telephone Company of California
1970	BAUMANN B PHOTGRPHY	General Telephone Company of California
1931	West End Consolidated Water Co Wm Springer pres R W Davis sec	Los Angeles Directory Company Publishers
	Upland Water Co R W Davis sec	Los Angeles Directory Company Publishers
	Mountain View Water Co R W Davis sec	Los Angeles Directory Company Publishers

273 E 9TH ST

Year	Uses	Source
2003	CONTRERAS Antonio	Haines & Co Publishers
	LA PALMET	Haines & Co Publishers
1995	LA PALMITA	GTE Directories
1985	ERA THE HOMESELLERS	GTE

274 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1985	MIGUELS HAIR SALON	GTE
1970	DMAXWELLIUPL HR PASHNS	General Telephone Company of California
1960	Maxwell Of Upland Hair Fashions	General Telephone Company Publishers

276 E 9TH ST

Year	Uses	Source
2003	ATTHE GROVE	Haines & Co Publishers
	PRODUCTIONS GROVETHEATRE	Haines & Co Publishers
1995	AT THE GROVE PRODUCTIONS	GTE Directories
1985	GROVE THEATRE	GTE
1980	GROVE THEATRE	GTE General Telephone Company of California
1970	OGROVE THEATRE	General Telephone Company of California

279 E 9TH ST

Year	Uses	Source
1940	Freeman Jos H Wanda gas sta	Los Angeles Directory Co.

290 E 9TH ST

Year	Uses	Source
1940	First Church of the Nazarene Rev Will South pastor	Los Angeles Directory Co.

FINDINGS

295 E 9TH ST

Year	Uses	Source
2003	X 3 RDAVN	Haines & Co Publishers
	ASSEMBLY OF GOD	Haines & Co Publishers
1995	S 05 G G BOOKKEEPINIG/ TAX	GTE Directories
	ASSEMBLY/GOD SPANISH	GTE Directories
1985	ASSEMBLY/GOD SPANISH	GTE
1980	ASSEMBLY OF GOD 1ST	GTE General Telephone Company of California
	ASSEMBLY/GOD SPANISH	GTE General Telephone Company of California
1970	Ft RST ASSEMBLY GOD	General Telephone Company of California

304 E 9TH ST

Year	Uses	Source
1980	MC PHERSON L	GTE General Telephone Company of California

305 E 9TH ST

Year	Uses	Source
2003	CONSTRUCTION	Haines & Co Publishers
	MANAGEMENT GROUP	Haines & Co Publishers
	LAEARGE Joshua	Haines & Co Publishers
	J P LABARGE	Haines & Co Publishers
	QUALITY	Haines & Co Publishers
1985	BETTY S BOOKKEEPING	GTE
1970	B SHOP KENNETH	General Telephone Company of California
1960	Hill Billy M	General Telephone Company Publishers
1940	Ackerson Truman T Mildred 0 phys	Los Angeles Directory Co.

310 E 9TH ST

Year	Uses	Source
1960	SKYCREST FORD	General Telephone Company Publishers
	Skycrest Motors	General Telephone Company Publishers

311 E 9TH ST

Year	Uses	Source
1980	GAULKE GLEN	GTE General Telephone Company of California

FINDINGS

313 E 9TH ST

Year	Uses	Source
1995	CARRILLO CONSULTING	GTE Directories

316 E 9TH ST

Year	Uses	Source
1980	THOMPSON M FRANK	GTE General Telephone Company of California

317 E 9TH ST

Year	Uses	Source
1980	RATHMANN G	GTE General Telephone Company of California

319 E 9TH ST

Year	Uses	Source
1995	B RETIREMENT ROLLOVERS	GTE Directories
	B TRISTAR MORTGAGE	GTE Directories
	SCHUMAN PHYLLIS	GTE Directories

321 E 9TH ST

Year	Uses	Source
1980	MARCH ROBT J	GTE General Telephone Company of California

323 E 9TH ST

Year	Uses	Source
1995	v B P WEBB	GTE Directories
1931	Heath Layman E Agnes restr	Los Angeles Directory Company Publishers

324 E 9TH ST

Year	Uses	Source
1980	RAKICH PETER N	GTE General Telephone Company of California

326 E 9TH ST

Year	Uses	Source
1995	DELTAPAN NO 6 INC	GTE Directories

327 E 9TH ST

Year	Uses	Source
1980	DYER WILSON	GTE General Telephone Company of California

FINDINGS

329 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1985	STONE BRADFORD	GTE
1980	STONE BRADFORD	GTE General Telephone Company of California

330 E 9TH ST

Year	Uses	Source
1931	Grier & Redmon C E Grier G T Redmon real est	Los Angeles Directory Company Publishers
1923	Little Horace fertilizer agt	Los Angeles Directory Company

333 E 9TH ST

Year	Uses	Source
1980	KINLEY JAS E	GTE General Telephone Company of California

335 E 9TH ST

Year	Uses	Source
1931	Jacobs Clara R Mrs notions	Los Angeles Directory Company Publishers

338 E 9TH ST

Year	Uses	Source
1960	Childs J L	General Telephone Company Publishers

341 E 9TH ST

Year	Uses	Source
1931	Norman Jas P C Sarah watchmkr	Los Angeles Directory Company Publishers

355 E 9TH ST

Year	Uses	Source
2003	STONE FUNERAL HOME	Haines & Co Publishers
	FD NO	Haines & Co Publishers
1995	STONE FUNERAL HOME	GTE Directories
1985	STONE FUNERAL HOME	GTE
1980	STONE FUNERAL HOME	GTE General Telephone Company of California
1970	n STCNE FUNERAL HOME	General Telephone Company of California
1960	Stone E Tweed funrl dir	General Telephone Company Publishers
	STONE FUNERAL HOME	General Telephone Company Publishers

FINDINGS

356 E 9TH ST

Year	Uses	Source
2003	0 COBB Michael	Haines & Co Publishers

357 E 9TH ST

Year	Uses	Source
1931	Safeway Stores Inc gro	Los Angeles Directory Company Publishers

364 E 9TH ST

Year	Uses	Source
1931	Benson Ethel H M/irs	Los Angeles Directory Company Publishers
	Benson Hugh H	Los Angeles Directory Company Publishers

365 E 9TH ST

Year	Uses	Source
1931	Grier Cless D Mrs wonens co	Los Angeles Directory Company Publishers

374 E 9TH ST

Year	Uses	Source
2003	DAMASKE Charles	Haines & Co Publishers
1980	+ LANKFORD KENNETH	GTE General Telephone Company of California
1970	GARCIA CEASAR	General Telephone Company of California
1960	Garrison Martha B	General Telephone Company Publishers

386 E 9TH ST

Year	Uses	Source
1931	Denton Ruth	Los Angeles Directory Company Publishers
	Denton Minta wid D F	Los Angeles Directory Company Publishers
1923	Toomey Othelia student	Los Angeles Directory Company
	Toomey L Ord student	Los Angeles Directory Company
	Toomey Frank X Marie E mach	Los Angeles Directory Company

389 E 9TH ST

Year	Uses	Source
1931	Moser Wilma drsmkr	Los Angeles Directory Company Publishers

390 E 9TH ST

Year	Uses	Source
2003	OGONZALEZDenise	Haines & Co Publishers
1985	MAUCH J J	GTE

FINDINGS

Year	Uses	Source
1980	MAUCH J J	GTE General Telephone Company of California
1970	MAUCH J J	General Telephone Company of California

391 E 9TH ST

Year	Uses	Source
2003	X 4 THAVN	Haines & Co Publishers
	XXXX	Haines & Co Publishers
1995	i Teresi Donna	GTE Directories
1985	DIETZ JEFFERY L	GTE
1960	HAYDEN L A	General Telephone Company Publishers
1940	Burnell Rose Mrs	Los Angeles Directory Co.

404 E 9TH ST

Year	Uses	Source
2003	JOHNSON Frederick	Haines & Co Publishers
1980	SLAGLE JENNIFER	GTE General Telephone Company of California
	SLAGLE ROBT	GTE General Telephone Company of California
1970	BALDWIN R M	General Telephone Company of California
1960	Baldwin Ruby	General Telephone Company Publishers
1940	Parkhurst Harold Ruby eng	Los Angeles Directory Co.

405 E 9TH ST

Year	Uses	Source
1931	Ruedy Chas Maude A	Los Angeles Directory Company Publishers

406 E 9TH ST

Year	Uses	Source
1923	Lemon R Frank Bertha v pres First National Bank	Los Angeles Directory Company

407 E 9TH ST

Year	Uses	Source
2003	ESCANUELAS George	Haines & Co Publishers
	JARAMILLOJamie	Haines & Co Publishers
1985	MOUNT KENT RALPH	GTE
1980	MOUNT KENT RALPH	GTE General Telephone Company of California
1970	MOUNT K R	General Telephone Company of California
1940	Roberts Mary J Mrs	Los Angeles Directory Co.

Year	Uses	Source
1940	Muneson Ben	Los Angeles Directory Co.
	Johnston Fred	Los Angeles Directory Co.

410 E 9TH ST

Year	Uses	Source
1980	NIELSEN BRYAN	GTE General Telephone Company of California
1931	D & D Rubber Co A J Dorrity F P Dunbar tires	Los Angeles Directory Company Publishers

414 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1985	WEST END TOXIC ABUSE	GTE
1970	a JGES RADIO / TV SERV	General Telephone Company of California
1960	California Floor & Wall Coverings	General Telephone Company Publishers
	Johnson R W Real Estate	General Telephone Company Publishers

420 E 9TH ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

421 E 9TH ST

Year	Uses	Source
2003	GARCIA Cesanro	Haines & Co Publishers
	SWANSON Slteven	Haines & Co Publishers
1995	Swanson Steven	GTE Directories
1980	GARCIA MANDO	GTE General Telephone Company of California
1970	EDEN J H	General Telephone Company of California
1960	Merchant Jas	General Telephone Company Publishers
1940	Merchant Gwendolyn mach opr	Los Angeles Directory Co.
	Merchant Jas Florence M	Los Angeles Directory Co.

424 E 9TH ST

Year	Uses	Source
2003	HERNANDEZJorge	Haines & Co Publishers
	TINAJERO Felipe	Haines & Co Publishers
1995	Tinajero Jr Felipe	GTE Directories
1985	MCKENNEY ON	GTE
1980	MCKENNEY ON	GTE General Telephone Company of California

FINDINGS

Year	Uses	Source
1970	MC KENNEY	General Telephone Company of California
1960	Dinger Jas A	General Telephone Company Publishers

427 E 9TH ST

Year	Uses	Source
1980	BLEEKER SIMON P	GTE General Telephone Company of California

429 E 9TH ST

Year	Uses	Source
1931	Ston E Tweed Fella undtkr	Los Angeles Directory Company Publishers

438 E 9TH ST

Year	Uses	Source
1931	Regan Timothy W Margt ydmn	Los Angeles Directory Company Publishers

439 E 9TH ST

Year	Uses	Source
2003	OSTIFFLER Kryk	Haines & Co Publishers
1980	PEARSON GEO W	GTE General Telephone Company of California
1970	PEARSON G W	General Telephone Company of California
1960	Pearson Geo W	General Telephone Company Publishers
1940	Jones Robt E radio techn	Los Angeles Directory Co.
	Inc	Los Angeles Directory Co.

442 E 9TH ST

Year	Uses	Source
2003	LABARGE Joshua	Haines & Co Publishers
1970	JURDAN H E	General Telephone Company of California
1960	Dixon Austin	General Telephone Company Publishers

449 E 9TH ST

Year	Uses	Source
2003	SERVICE	Haines & Co Publishers
	OJEANSON Donald	Haines & Co Publishers
	INTERNATIONAL LTD	Haines & Co Publishers
	HASAGA	Haines & Co Publishers
	R&A PROFESSIONAL	Haines & Co Publishers
1985	BRANN ESTHER N	GTE
1980	BRANN ESTHER N	GTE General Telephone Company of California

Year	Uses	Source
1970	BRANN E N	General Telephone Company of California
1960	Brann Esther N	General Telephone Company Publishers
	Pearson Ola	General Telephone Company Publishers
1940	Pierson Ola	Los Angeles Directory Co.

451 E 9TH ST

Year	Uses	Source
1931	Howe Walter miniature golf	Los Angeles Directory Company Publishers

454 E 9TH ST

Year	Uses	Source
2003	LABARGE Joshua	Haines & Co Publishers
1980	PRIDDY RUSSELL	GTE General Telephone Company of California
1970	MARTIN 8 M	General Telephone Company of California
1960	Mc Bride Janet	General Telephone Company Publishers

456 E 9TH ST

Year	Uses	Source
1931	Fraunfelter Mary wid Jas	Los Angeles Directory Company Publishers
	Fraunfelter Eunice	Los Angeles Directory Company Publishers
1923	Frownfelter Mary wid J H	Los Angeles Directory Company
	Frownfelter Eunice	Los Angeles Directory Company

463 E 9TH ST

Year	Uses	Source
2003	CORP Cameron	Haines & Co Publishers
1985	POIRIER FRANCINE	GTE
1960	Stamas M Mrs	General Telephone Company Publishers
1940	Rogers Harry nurserywkr	Los Angeles Directory Co.

474 E 9TH ST

Year	Uses	Source
1931	Bruce Colden L Belle fruitwkr	Los Angeles Directory Company Publishers
	Bruce Chancy L fruitwkr	Los Angeles Directory Company Publishers
1923	Regan Timothy W lab Upland Lemon Growers Assn	Los Angeles Directory Company

475 E 9TH ST

Year	Uses	Source
2003	DICKSON Frank	Haines & Co Publishers

FINDINGS

Year	Uses	Source
1980	ALLEN H C	GTE General Telephone Company of California
1970	ALLEN H C	General Telephone Company of California
1960	Allen H C	General Telephone Company Publishers
1940	Kennedy Harry C Gay 0	Los Angeles Directory Co.

476 E 9TH ST

Year	Uses	Source
2003	ODEPAULA EBruce	Haines & Co Publishers
1960	Horsch EJ Mrs	General Telephone Company Publishers
1940	Youngblood Vernon W Lillian lab	Los Angeles Directory Co.
	Plott Harmon J Naomi lab	Los Angeles Directory Co.
	Eden Bolin G Mary mgr Colonial Apts	Los Angeles Directory Co.
	Beutler Emma B Mrs	Los Angeles Directory Co.
	Jones Nellie J wid J J	Los Angeles Directory Co.
	Kliewer Barbara M Mrs	Los Angeles Directory Co.
	Colonial Apartments B G Eden mgr	Los Angeles Directory Co.

483 E 9TH ST

Year	Uses	Source
1995	Morrison Doug	GTE Directories

490 E 9TH ST

Year	Uses	Source
1931	Hawkey Agnes B Mrs confy	Los Angeles Directory Company Publishers
	Hawkey Bert Agnes B	Los Angeles Directory Company Publishers
1923	Hawkey Audrey student	Los Angeles Directory Company

491 E 9TH ST

Year	Uses	Source
2003	X 5TH AV N	Haines & Co Publishers
	SYLVA MACHINERY	Haines & Co Publishers
	COMPANY	Haines & Co Publishers
	SYLVA James	Haines & Co Publishers
	COMPANY SYLVA MACHINERY	Haines & Co Publishers
1995	SYLVA MACHINERY CO J M	GTE Directories
1985	WARREN CARY	GTE
	KRISCHUK JOHN	GTE
1970	BEATTIE W K	General Telephone Company of California
1960	Beattie W WK Mrs	General Telephone Company Publishers

Year	Uses	Source
1940	Beattie Dorothy J	Los Angeles Directory Co.
	Beattie Wm K Violet J pres San Antonio Water Co	Los Angeles Directory Co.
1931	Burwell Lawrence A compositor	Los Angeles Directory Company Publishers
	Burwell Rose wid T S siswn	Los Angeles Directory Company Publishers
	Ganiard Silas C	Los Angeles Directory Company Publishers
1923	Priestly John Rose pntr	Los Angeles Directory Company
	Gresham Bessie K Mrs clk P 0	Los Angeles Directory Company

504 E 9TH ST

Year	Uses	Source
1931	Baldwin Ruth	Los Angeles Directory Company Publishers
	Baldwin Kimble Ruby M	Los Angeles Directory Company Publishers
1923	Baldwin Abner K Ruby M auto opr	Los Angeles Directory Company

505 E 9TH ST

Year	Uses	Source
2003	YANDELL Juanila	Haines & Co Publishers
1985	FRENCH CLIFFORD	GTE
1960	Roper Willis F	General Telephone Company Publishers
1940	Head Alvin Nona citruswkr	Los Angeles Directory Co.
	Childers Ray C Leta citruswkr	Los Angeles Directory Co.

507 E 9TH ST

Year	Uses	Source
1931	Thomas Emma wid Frank	Los Angeles Directory Company Publishers
	Roberts May J wid John	Los Angeles Directory Company Publishers
	Merritt Fred pntr	Los Angeles Directory Company Publishers

E C ST

160 E C ST

Year	Uses	Source
2003	SANCTUARY	Haines & Co Publishers
	SKIN&BODY CARE	Haines & Co Publishers

170 E C ST

Year	Uses	Source
2003	KARCHER Angelina	Haines & Co Publishers
	X 2 NDAVN	Haines & Co Publishers
1995	Apartment	GTE Directories

FINDINGS

Year	Uses	Source
1985	APARTMENT	GTE
1970	APARTMENT	General Telephone Company of California

180 E C ST

Year	Uses	Source
1995	FAMILY TIES	GTE Directories

201 E C ST

Year	Uses	Source
1995	PETERSON MD DANL L	GTE Directories
1985	TRANSNATIONAL BUSNSS	GTE
	WESTERN PAC FUNDING	GTE

204 E C ST

Year	Uses	Source
1995	APPRAISERS WEST	GTE Directories

205 E C ST

Year	Uses	Source
1995	A FINANCIAL SERVICES	GTE Directories

206 E C ST

Year	Uses	Source
1995	SPECTRUM ASSESSMENT GROUP	GTE Directories
1985	AMERICAN FIDELITY	GTE

208 E C ST

Year	Uses	Source
1985	BANKS CPA MARSHA M	GTE

209 E C ST

Year	Uses	Source
1985	RMD PROPERTIES	GTE

218 E C ST

Year	Uses	Source
2003	WEALTH CODE	Haines & Co Publishers
	X EUCLID AV N	Haines & Co Publishers
	X 1 STAVN	Haines & Co Publishers

FINDINGS

250 E C ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1995	DR DONS DEU	GTE Directories
1985	DR DON S LIQUOR	GTE

291 E C ST

Year	Uses	Source
2003	X 3 RDAVN	Haines & Co Publishers
	SUBWAY	Haines & Co Publishers

329 E C ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

352 E C ST

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
1995	OLDTMRS	GTE Directories
	CITY OF UPLAND	GTE Directories
	STEELWORKER	GTE Directories
1985	P A L	GTE
	STEELWORKERS OLDTMRS	GTE
1970	SHOPPING BAG FOS	General Telephone Company of California

382 E C ST

Year	Uses	Source
1985	R & R SUPPLY CO	GTE

384 E C ST

Year	Uses	Source
1985	BUS&PROFSSNL SVC INC	GTE
1970	SCOTTS DONUT HOUSE	General Telephone Company of California

386 E C ST

Year	Uses	Source
1985	UPLAND TEACHERS ASSN	GTE
1970	INSURANCE COMPANIES	General Telephone Company of California

388 E C ST

Year	Uses	Source
1985	RONCO DRYWALL	GTE

Year	Uses	Source
1970	BOBS CLEANERS	General Telephone Company of California

390 E C ST

Year	Uses	Source
1985	A G TAX SERVICE	GTE
1970	c THE BARBER SHOP	General Telephone Company of California

392 E C ST

Year	Uses	Source
1970	o CLECPATRA HAIR ODESGN	General Telephone Company of California

394 E C ST

Year	Uses	Source
1985	CROSSROADS GALLERY	GTE

398 E C ST

Year	Uses	Source
1985	BUCKEYE GAS PRODUCTS	GTE

402 E C ST

Year	Uses	Source
1985	CLARENCE S TV	GTE
1970	c STEt ENS CUSTOM INTRS 982 008 B	General Telephone Company of California
	c STEVENS CUSTM INTRS	General Telephone Company of California

E D ST

267 E D ST

Year	Uses	Source
1970	RICHESIN	General Telephone Company of California

287 E D ST

Year	Uses	Source
1995	FANT DONALD D	GTE Directories

397 E D ST

Year	Uses	Source
1995	Strauss Artie	GTE Directories

450 E D ST

Year	Uses	Source
1995	Werhane Gilmore	GTE Directories

FINDINGS

N 2ND

156 N 2ND

Year	Uses	Source
1945	WEST Calla r	Southern California Telephone Company
1926	Ivey J Ross Mollie lab	Los Angeles Directory Co.

157 N 2ND

Year	Uses	Source
1991	Vargas Miguel	GTE California Incorporated

158 N 2ND

Year	Uses	Source
1945	Hall Foster N r	Southern California Telephone Company

184 N 2ND

Year	Uses	Source
1975	Torres Linda	Pacific Telephone Co

N 2ND AVE

151 N 2ND AVE

Year	Uses	Source
1964	Selk Nathan ofc	Luskey Brothers & Co
	Modern Decorators	Luskey Brothers & Co
	Selks Linoleum & Awning Co	Luskey Brothers & Co
1960	SELK NATHAN linoleum	General Telephone Company Publishers
1956	SELK NATHAN linoleum	General Telephone Company Publishers

152 N 2ND AVE

Year	Uses	Source
1964	Hottels Budget Shop	Luskey Brothers & Co
1956	Stewart Hal feed	General Telephone Company Publishers

155 N 2ND AVE

Year	Uses	Source
1964	Buss & Marys Cafe	Luskey Brothers & Co
1960	Buss & Mary Cafe	General Telephone Company Publishers
1956	Tonys Cafe	General Telephone Company Publishers

FINDINGS

161 N 2ND AVE

Year	Uses	Source
2003	PFERRO Robert	Haines & Co Publishers
	GALLERY	Haines & Co Publishers
	FINESTCOLLECTIBLES	Haines & Co Publishers
1995	GARRETT D DESIGN	GTE Directories
1990	Garrett E	GTE
	Or	GTE
	GARRETT DONALD DEISN 9807	GTE
1985	GARRETT D DESIGN	GTE
1970	MODERN DECORATORS	General Telephone Company of California
1951	Upland Used Purn	Los Angeles Directory Company Publishers
1938	Adams Lafayette Sarah gro	Los Angeles Directory Co.

162 N 2ND AVE

Year	Uses	Source
1995	MANY FINE THINGS	GTE Directories

164 N 2ND AVE

Year	Uses	Source
2003	RUFF CUTS	Haines & Co Publishers
	UPLAND FEED&FUEL	Haines & Co Publishers
	STUMP Ray	Haines & Co Publishers
	PET SUPPLIES	Haines & Co Publishers
1995	UPLAND FEED & FUEL	GTE Directories
1985	UPLAND FEED 8 FUEL	GTE
1970	UPLAND FEED AND FUEL	General Telephone Company of California
1964	Upland Feed & Fuel Co	Luskey Brothers & Co
1960	So California Poultry Guano Co	General Telephone Company Publishers
	UPLAND FE ED & FUEL CO	General Telephone Company Publishers
1956	UPLAND FEED & FUEL CO	General Telephone Company Publishers
1951	Upland Feed & Fuel Co	Los Angeles Directory Company Publishers

165 N 2ND AVE

Year	Uses	Source
1938	Aday Harvey shoe shiner	Los Angeles Directory Co.

167 N 2ND AVE

Year	Uses	Source
1990	D n Ks Billiards & Restaurant	GTE
1985	0 N K S BILLRDS/RESTR	GTE

Year	Uses	Source
1970	CRACK / CUE BILLARDS	General Telephone Company of California
1964	Fritz & Marys Cafe & Recreation Parlor	Luskey Brothers & Co
1960	Fritz & Marys Cafe	General Telephone Company Publishers
1956	Fritz & Marys Cafe	General Telephone Company Publishers
1951	Fritz & Marys Cafe	Los Angeles Directory Company Publishers
1946	Allen F M restr	Los Angeles Directory Company Publishers

170 N 2ND AVE

Year	Uses	Source
2003	STUMP Ray	Haines & Co Publishers
1956	Upland Radio	General Telephone Company Publishers
1951	Upland Radio Sales & Serv	Los Angeles Directory Company Publishers
1946	radio repr	Los Angeles Directory Company Publishers
	Harrison L A	Los Angeles Directory Company Publishers

171 N 2ND AVE

Year	Uses	Source
1951	a nce lay mond	Los Angeles Directory Company Publishers
	Chowning Victor jwlr	Los Angeles Directory Company Publishers
1946	Chowning Victor	Los Angeles Directory Company Publishers
1940	Chowning Victor jwlr	Los Angeles Directory Co.

172 N 2ND AVE

Year	Uses	Source
1964	ACME REFRIGERATION & APPLIANCE BH Kelly	Luskey Brothers & Co

175 N 2ND AVE

Year	Uses	Source
2003	SMOTHERS BARBERS	Haines & Co Publishers
	SMOTHERS Howard	Haines & Co Publishers
1995	SMOTHERS BARBERS	GTE Directories
1990	Smothers Barbers	GTE
1985	SMOTHERS BARBERS	GTE
1964	Smothers Barbers	Luskey Brothers & Co
1951	Gleason Harold	Los Angeles Directory Company Publishers
	Gleas on Harold Barber Shop	Los Angeles Directory Company Publishers
1946	Batchelor Lillian	Los Angeles Directory Company Publishers
1938	Pearson Geo Ada cigars	Los Angeles Directory Co.

FINDINGS

176 N 2ND AVE

Year	Uses	Source
2003	DENTALSMITH LAB	Haines & Co Publishers
1995	DENTALSMf TH LAB	GTE Directories
1985	DENTALSMITH LAB	GTE
1970	OHAIR SAFARI	General Telephone Company of California
1964	Upland Leather Goods	Luskey Brothers & Co
1960	Stubs Barber Shop	General Telephone Company Publishers
1951	Vacant	Los Angeles Directory Company Publishers
1946	Duncan H V shoe	Los Angeles Directory Company Publishers
1938	Johnson Carl W shoe repr	Los Angeles Directory Co.

177 N 2ND AVE

Year	Uses	Source
1951	Craig Mary A	Los Angeles Directory Company Publishers

180 N 2ND AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

181 N 2ND AVE

Year	Uses	Source
2003	THOMPSON CLEANER	Haines & Co Publishers
	WHANG Suk	Haines & Co Publishers
	TOM SON CLEANERS	Haines & Co Publishers
1995	v LA SERENETTA ITAUAN	GTE Directories
	TOM SON CLEANERS	GTE Directories
1985	TOM SON CLEANERS	GTE
1970	7 TOM SON CLEANERS	General Telephone Company of California
1964	Tom Son Cleaners	Luskey Brothers & Co
1960	TOM SON CLEANERS	General Telephone Company Publishers
1956	Tom Son Cleaners	General Telephone Company Publishers
1951	Tom Son Clnrs do cinr	Los Angeles Directory Company Publishers
1946	Pittenger T D do	Los Angeles Directory Company Publishers
1938	Hogan Eug Idella dclo clnr	Los Angeles Directory Co.

182 N 2ND AVE

Year	Uses	Source
2003	MANY FINE THINGS	Haines & Co Publishers
1990	Stevenson Feed	GTE
1985	COAST/CST LOCOMOTIVE	GTE

Year	Uses	Source
1970	OUPLAND LIQUOR STORE	General Telephone Company of California
1964	Upland Liquqrs	Luskey Brothers & Co
1960	UPLAND LIQUOR STORE	General Telephone Company Publishers
1956	Upland Liquor Store	General Telephone Company Publishers
1951	Upland Liquor Store	Los Angeles Directory Company Publishers
1946	French H C liquors	Los Angeles Directory Company Publishers

183 N 2ND AVE

Year	Uses	Source
1956	Jennings Engineering Co	General Telephone Company Publishers
1951	Stubs Barber Shop	Los Angeles Directory Company Publishers
1946	Long P 0 barber	Los Angeles Directory Company Publishers
1938	Long Perry 0 Eva barber	Los Angeles Directory Co.

184 N 2ND AVE

Year	Uses	Source
1964	Helens Cake Shop	Luskey Brothers & Co
1956	EUCLID CORP	General Telephone Company Publishers
1951	Vacant	Los Angeles Directory Company Publishers
1946	Lee J F 2d hd furn	Los Angeles Directory Company Publishers

185 N 2ND AVE

Year	Uses	Source
1951	Harris oy	Los Angeles Directory Company Publishers
	Sou Cal Edison Co	Los Angeles Directory Company Publishers
1946	Sou Cal Edison Co	Los Angeles Directory Company Publishers
1938	Miller Saml	Los Angeles Directory Co.
	Southern California Edison Co Ltd J F Fredendall agt	Los Angeles Directory Co.
	Littooy Lizzie	Los Angeles Directory Co.

186 N 2ND AVE

Year	Uses	Source
2003	CAFFE ALLEGRO	Haines & Co Publishers
1985	LAS CAZUELITAS RESTR	GTE
1970	MR GS COFFEE SHOP	General Telephone Company of California
1964	Home Cafe	Luskey Brothers & Co
1960	Home Cafe	General Telephone Company Publishers
1956	Home Cafe	General Telephone Company Publishers
1951	Home Cafe	Los Angeles Directory Company Publishers

Year	Uses	Source
1946	Long Bros paints	Los Angeles Directory Company Publishers

187 N 2ND AVE

Year	Uses	Source
2003	JERS BOARD SHOP	Haines & Co Publishers
	COBB Michael	Haines & Co Publishers

188 N 2ND AVE

Year	Uses	Source
1995	KIOSK CORNER	GTE Directories
1990	Livingston B & R	GTE
	Livingston & Associates	GTE
1985	TRANSAMERICA FINANCL	GTE
1951	Ll t JCC	Los Angeles Directory Company Publishers

190 N 2ND AVE

Year	Uses	Source
1951	Bank of Americ	Los Angeles Directory Company Publishers

195 N 2ND AVE

Year	Uses	Source
2003	9TH E	Haines & Co Publishers
	MANUFACTURING CO	Haines & Co Publishers
	MEDICINE INC YEH HERBS	Haines & Co Publishers
	INTERNATL YEH CNTR NATURAL	Haines & Co Publishers
	INTERNATL NATURAL MEDICINE	Haines & Co Publishers
	YOUTH 6 BEAUTYINST NATURAL MEDICINE	Haines & Co Publishers
	DR PEARLS	Haines & Co Publishers
1995	YEH CENTER OF NATURA	GTE Directories
	WELLS FARGO BANK	GTE Directories
1990	Escrow	GTE
	Checking & Savings	GTE
	Wells G La Verne	GTE
	All Other Departments	GTE
1985	CROCKER NATIONAL BNK	GTE
1970	FIRST NAT BK/UPLANO	General Telephone Company of California
1964	First National Bank of Upland	Luskey Brothers & Co
	FIRST NATIONAL BANK OF UPLAND JT Waller vice president	Luskey Brothers & Co
1960	FIRST NATL BANK OF UPLAND	General Telephone Company Publishers

Year	Uses	Source
1956	FIRST NATL BANK OF UPLAND	General Telephone Company Publishers
1951	First National Ba k of Upland	Los Angeles Directory Company Publishers
1946	First National Bank	Los Angeles Directory Company Publishers
	of Upland	Los Angeles Directory Company Publishers

196 N 2ND AVE

Year	Uses	Source
1964	UPLAND SAVINGS & LOAN ASSN C Richard Hield president	Luskey Brothers & Co
	Upland Savings & Loan Assn	Luskey Brothers & Co

199 N 2ND AVE

Year	Uses	Source
2003	YEHTimothy	Haines & Co Publishers

200 N 2ND AVE

Year	Uses	Source
1995	GESNER ERNIE	GTE Directories
	FARMERS INSURANCE	GTE Directories

204 N 2ND AVE

Year	Uses	Source
1995	OYSTER UGHT	GTE Directories
1985	UPLAND GRAPHICS	GTE
1960	Central Mkt	General Telephone Company Publishers

205 N 2ND AVE

Year	Uses	Source
1960	Harris Pharmacy	General Telephone Company Publishers
1940	Mac The Medicine Man Inc P H Mc Quillen pres drugs	Los Angeles Directory Co.

215 N 2ND AVE

Year	Uses	Source
1985	J J ATWOOD CO	GTE

216 N 2ND AVE

Year	Uses	Source
1995	THE ART ROOM	GTE Directories
1985	SHAW S	GTE
1960	COLBORN WISE elec appis	General Telephone Company Publishers

FINDINGS

218 N 2ND AVE

Year	Uses	Source
1985	CLARK CARL E	GTE
	CAROLYNN	GTE
	ASID INLAND CHAPTER	GTE
	SULLIVAN PHYLLIS J	GTE
	DESIGN GROUP	GTE

220 N 2ND AVE

Year	Uses	Source
1995	DAVIS JEWELERS	GTE Directories
1985	DAVIS JEWELERS	GTE
1960	DAVIS JEWELERS	General Telephone Company Publishers
1940	COLBORN ELECTRIC CO Amos R Colborn Westinghouse Dealer Electrical Contracting Electric Fixtures and Supplies A Complete Line of Electric Household Appliances	Los Angeles Directory Co.

226 N 2ND AVE

Year	Uses	Source
1960	Darys Shirt Shop The	General Telephone Company Publishers
1940	Goslin Homer T Ruth J jwlr	Los Angeles Directory Co.

228 N 2ND AVE

Year	Uses	Source
1995	AVERY REAL ESTATE	GTE Directories
1985	VILLAGE SANDWICH SHP	GTE
1960	Donut Shop The	General Telephone Company Publishers

229 N 2ND AVE

Year	Uses	Source
1995	BOOKWORM OF UPLAND	GTE Directories
1985	BOOKWORM OF UPLAND	GTE
1960	WESTRN AUTO ASSOCIATE STORE	General Telephone Company Publishers
1940	MEHL HARDWARE CO J W Mehl Pres John Mehl I Jr Sec Treas Hardware and Plumbing	Los Angeles Directory Co.

232 N 2ND AVE

Year	Uses	Source
1985	MANY FINE THINGS	GTE

233 N 2ND AVE

Year	Uses	Source
1995	1 0 0 F HALL NO	GTE Directories
1985	I 0 0 F HALL NO	GTE

236 N 2ND AVE

Year	Uses	Source
1995	GOLDEN NAIL	GTE Directories

237 N 2ND AVE

Year	Uses	Source
1985	MARCIE AT THE CUTTNG	GTE
	CUTTING EXCHANGE	GTE
1960	Pierce Edgar C acct	General Telephone Company Publishers
	Farquhar Ray 0 acct	General Telephone Company Publishers

238 N 2ND AVE

Year	Uses	Source
1985	SUZANNE S PERFORMING	GTE
1960	Baums Cleaners	General Telephone Company Publishers

241 N 2ND AVE

Year	Uses	Source
1995	LONGS ESTATE SALES	GTE Directories
1985	WHITE OWL THE	GTE
1960	Diers shoes	General Telephone Company Publishers

242 N 2ND AVE

Year	Uses	Source
1995	THE UPLAND CO	GTE Directories
1985	CALICO REFLECTIONS	GTE

247 N 2ND AVE

Year	Uses	Source
1995	TRANS WORLD TRAVEL	GTE Directories
1985	WORLD TRAVEL BUR INC	GTE

250 N 2ND AVE

Year	Uses	Source
1995	C GLORIA NIELSEN R E	GTE Directories
	E s SECOND AVENUE ROSE	GTE Directories
	H C F HOLLINGSWORTH	GTE Directories

Year	Uses	Source
1995	F SPORTS PROGRAMS	GTE Directories
	D RUSTIC RAZOR THE	GTE Directories
	Building A A PERFECT POSE	GTE Directories

251 N 2ND AVE

Year	Uses	Source
1995	Angen Dale	GTE Directories
	SIDEBOARD THE	GTE Directories
1985	SIDEBOARD THE	GTE
1960	Horvaths Shoe Store	General Telephone Company Publishers
1940	Engle John E mens furngs	Los Angeles Directory Co.

256 N 2ND AVE

Year	Uses	Source
1960	Masonic Hall	General Telephone Company Publishers
1940	Farmer Wm R Hazel K dentist	Los Angeles Directory Co.
	Masonic Hall	Los Angeles Directory Co.

260 N 2ND AVE

Year	Uses	Source
1995	Buliding	GTE Directories
	A UPLAND BARBER SHOP	GTE Directories
1985	SKINNERS HSE/ACCENTS	GTE
1960	UPLAND PHARMACY	General Telephone Company Publishers
1940	Mc Kean Harold A Mina M drugs	Los Angeles Directory Co.

261 N 2ND AVE

Year	Uses	Source
1995	I DO 1 DO BRIDAL FORMAL	GTE Directories
1985	PEARSON JEWELERS	GTE
1960	SCOTTS JEWELERS	General Telephone Company Publishers

263 N 2ND AVE

Year	Uses	Source
1985	STRINGS 8 THINGS	GTE
1960	ALADDINS florst	General Telephone Company Publishers

267 N 2ND AVE

Year	Uses	Source
1995	LACROSSE CUSTOM UPHO	GTE Directories

FINDINGS

Year	Uses	Source
1985	LACROSSE CUSTM UPHOL	GTE
1960	Upland Paint & Hdwe	General Telephone Company Publishers

270 N 2ND AVE

Year	Uses	Source
1995	MCFADDEN S HALLMARK	GTE Directories
1985	MCFADDEN S HALLMARK	GTE
1960	Mc Faddens handicrtaft suppis	General Telephone Company Publishers

271 N 2ND AVE

Year	Uses	Source
1995	OLD BALDY BREWING CO	GTE Directories
1985	OMONAS DRESS SHOPS	GTE

275 N 2ND AVE

Year	Uses	Source
1985	THE LAST ACT	GTE

276 N 2ND AVE

Year	Uses	Source
1995	WILLIAMS ARCHITECTS	GTE Directories
1960	Palmers Sport Shop	General Telephone Company Publishers
1940	Palmer John P sporting gds	Los Angeles Directory Co.

278 N 2ND AVE

Year	Uses	Source
1985	CENTURY FNANCL ESCRW	GTE

279 N 2ND AVE

Year	Uses	Source
1995	Apartment	GTE Directories
1985	APARTMENT	GTE
	VALENTI FRANK REALTR	GTE
1960	Vance Marguerite	General Telephone Company Publishers
	Mc Intosh Susie	General Telephone Company Publishers

280 N 2ND AVE

Year	Uses	Source
1960	Ollsen Edw Mrs	General Telephone Company Publishers
1940	Reed Olive T bkpr City Hall	Los Angeles Directory Co.

FINDINGS

281 N 2ND AVE

Year	Uses	Source
1995	GOLDEN CLOSET	GTE Directories
1985	ALADDINS	GTE
1960	WISE PHARMACY	General Telephone Company Publishers
1940	Johnson Arth H Phoebe gro	Los Angeles Directory Co.
	Finn Alvin W Louise meats	Los Angeles Directory Co.

282 N 2ND AVE

Year	Uses	Source
1995	ALTAR OF PRAYER CNTR	GTE Directories
1985	ALTAR OF PRAYER CNTR	GTE
1940	Ryan Ralph D Nellie optom	Los Angeles Directory Co.

284 N 2ND AVE

Year	Uses	Source
1995	V SHEAR ELEGANCE BY NELDA	GTE Directories
	SPOILED ROTTEN	GTE Directories
1985	LORDS&LADIES HOUSE	GTE
1960	HOUSE OF BEAUTY	General Telephone Company Publishers

289 N 2ND AVE

Year	Uses	Source
1995	Apartment	GTE Directories
1960	Beard Wm Jas Jr	General Telephone Company Publishers

291 N 2ND AVE

Year	Uses	Source
1995	GREEN GABLE ANTIQUES	GTE Directories
1960	UPLAND HOME APPLIANCE	General Telephone Company Publishers

296 N 2ND AVE

Year	Uses	Source
1985	UPLAND PHARMACY	GTE
1960	Holts Hdwe & Gifts	General Telephone Company Publishers

299 N 2ND AVE

Year	Uses	Source
1985	ANTHONYS FURNITURE	GTE

FINDINGS

301 N 2ND AVE

Year	Uses	Source
1960	Marriotts Texaco Serv	General Telephone Company Publishers

305 N 2ND AVE

Year	Uses	Source
1995	DISCOUNT SILK FLOWERS	GTE Directories
1985	UPLAND LAW CLINIC	GTE
1960	RALPHS SPORTING GOODS	General Telephone Company Publishers
1940	VOTH MARVIN TEXACO SERVICE Marvin Voth Marfak Lubrication Goodrich and Hood Tires Auto Accessories	Los Angeles Directory Co.

313 N 2ND AVE

Year	Uses	Source
1995	Buildirtg J UPLAND TRAINS	GTE Directories
1985	BUILDING	GTE
	H KRUZE & KRUZE CONSTR	GTE
	F BRADLEY JOE POLYGRPH	GTE
	C SOLAR SHOP THE	GTE
	WESTERN HILLS INS	GTE
	COMMON GROUND MNSTRY	GTE
1940	Upland Realty & Insurance Co H 0 Blohm E 0 Bowden	Los Angeles Directory Co.

325 N 2ND AVE

Year	Uses	Source
1995	Building	GTE Directories
	A WEST COAST MANAGEMEN	GTE Directories
	A MCI	GTE Directories
	D EL CENTAVO	GTE Directories
	D D TODO MARKETING	GTE Directories
	F SAGE TIM INS	GTE Directories
1985	D ARBOR FINANCIAL SVCS	GTE
	C WASHNGTN INVNTRY SVC	GTE
	BUILDING A APPRAISALS PLUS	GTE
	L BROWN REALTY	GTE
	F SAGE TIM INS	GTE

337 N 2ND AVE

Year	Uses	Source
1960	HARVEYS PAINT STORE	General Telephone Company Publishers

FINDINGS

343 N 2ND AVE

Year	Uses	Source
1995	SUZANNE S PERFORMING	GTE Directories
1985	CHRISTIAN LIGHT BOOK	GTE
1960	CHRISTIAN LIGHT BOOK STORES	General Telephone Company Publishers
1940	CHAMBERS GARAGE C M Chambers Willys Dealer Sales & Service General Automotive Repairs	Los Angeles Directory Co.

367 N 2ND AVE

Year	Uses	Source
1985	WOLFE CHAS S	GTE
	UPLAND AIR/REFRGRATN	GTE
	TRUDGEON & KUHLMAN	GTE
	DOUGLAS CPA DONALD	GTE
1960	Maroney Donald E atty	General Telephone Company Publishers
	Garner Richard C atty	General Telephone Company Publishers
	Busch & Maroney attys	General Telephone Company Publishers
	Busch Henry M atty	General Telephone Company Publishers

368 N 2ND AVE

Year	Uses	Source
1960	Curieys Yellow Cab	General Telephone Company Publishers
	Pac Electric Railway Co	General Telephone Company Publishers

370 N 2ND AVE

Year	Uses	Source
1995	GONZALEZ CAROLYN HAIR	GTE Directories

376 N 2ND AVE

Year	Uses	Source
1995	MITCHELL S	GTE Directories
	FARFAN OLGA	GTE Directories
1985	ALLEN T MITCHELL	GTE
1960	MITCHELL ALLEN T & SON INC pimbng contrs	General Telephone Company Publishers
1940	SMALL ELECTRIC Formerly Guy W Small Howard J Clewett and Arth V Stayer Electrical Engineering Motors Rewinding and Repairing	Los Angeles Directory Co.

377 N 2ND AVE

Year	Uses	Source
1995	UPLAND CHIROPRACTIC	GTE Directories
1985	BRETHREN IN CHRIST	GTE
	BRETHREN IN CHRST CH	GTE

378 N 2ND AVE

Year	Uses	Source
1995	ACEVEDO VICKIE	GTE Directories
	CURL MASTERS BY CMLL	GTE Directories
	UNZUETA DAVID	GTE Directories
1985	WARREN JOSHUA J	GTE
1960	Bailin Harold A atty	General Telephone Company Publishers
	Thorne D Larry atty	General Telephone Company Publishers
	Mather Thorne & Bailin attys	General Telephone Company Publishers
1940	Gray Edw E E Ida lawyer	Los Angeles Directory Co.

379 N 2ND AVE

Year	Uses	Source
1995	v IEZZI ESTHER	GTE Directories

387 N 2ND AVE

Year	Uses	Source
1995	WILSON J M CIVIL	GTE Directories
	BUS & PROFESSNL SVC INC	GTE Directories
1985	J N WILSON & ASSOCS	GTE
1960	Naftel Bernard	General Telephone Company Publishers
	Grothe Marion W	General Telephone Company Publishers
	EMPIRE CO	General Telephone Company Publishers
	Milhiser Chas L ins Ofc	General Telephone Company Publishers

N 3RD

125 N 3RD

Year	Uses	Source
1926	Burrill Archie L Esther L carp	Los Angeles Directory Co.
	Burrill Gladys E student	Los Angeles Directory Co.

145 N 3RD

Year	Uses	Source
1991	Castro Louie A	GTE California Incorporated

Year	Uses	Source
1975	Castro Louie A	Pacific Telephone Co
1970	Castro Loule A	General Telephone Company of California
1945	Wobser Earl K r	Southern California Telephone Company
1926	Rock Clara	Los Angeles Directory Co.

159 N 3RD

Year	Uses	Source
1975	Robertson S Vance	Pacific Telephone Co
1945	Chandler E L r	Southern California Telephone Company

N 3RD AVE

135 N 3RD AVE

Year	Uses	Source
1938	Dettweiler Wm F Lena awnings	Los Angeles Directory Co.

148 N 3RD AVE

Year	Uses	Source
1995	CENTURY MEDICAL SYS	GTE Directories

149 N 3RD AVE

Year	Uses	Source
2003	SYSTEMS INC	Haines & Co Publishers
	CENTURYMEDICAL	Haines & Co Publishers
1990	Century Medical Systems Inc	GTE
1980	CUCAMONGA ANESTHETST	GTE General Telephone Company of California
1970	CHIC A DEE PRODS INC	General Telephone Company of California

151 N 3RD AVE

Year	Uses	Source
1960	Sharp Warner	General Telephone Company Publishers
1956	Sharp Warner	General Telephone Company Publishers
1951	Stofleth Paul	Los Angeles Directory Company Publishers
1938	Maxwell Olessa citruswkr	Los Angeles Directory Co.

167 N 3RD AVE

Year	Uses	Source
2003	CORD&ASSOCIATES	Haines & Co Publishers
	INVSTGTN&PLYGRPH MAYES Andrea	Haines & Co Publishers
	ENGINEERING HEARDS PRVTE	Haines & Co Publishers

FINDINGS

Year	Uses	Source
2003	INVSTGTNS CONVEYOR TECH	Haines & Co Publishers
	BOB 0 HEARDS PVT	Haines & Co Publishers
	CENTER B H ALARM CO	Haines & Co Publishers
	ADVENTURETRAVEL	Haines & Co Publishers
1995	Building	GTE Directories

171 N 3RD AVE

Year	Uses	Source
1951	Vacant	Los Angeles Directory Company Publishers
1938	Hall Clyde Myra	Los Angeles Directory Co.

177 N 3RD AVE

Year	Uses	Source
1938	Yost Lloyd Audrey mech RI L Stover	Los Angeles Directory Co.

187 N 3RD AVE

Year	Uses	Source
1995	FOOTHILL FAMILY SHELTER	GTE Directories
	I ASSOCIATED HEARING AIDS	GTE Directories

191 N 3RD AVE

Year	Uses	Source
1938	Jones Saml citruswkr	Los Angeles Directory Co.
	Owens Samil Cora carp	Los Angeles Directory Co.

195 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

240 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

250 N 3RD AVE

Year	Uses	Source
2003	UPLAND CTY REC	Haines & Co Publishers
	SENIOR CENTER	Haines & Co Publishers

260 N 3RD AVE

Year	Uses	Source
2003	D 101 BOLINGERJohn	Haines & Co Publishers

FINDINGS

Year	Uses	Source
2003	C 204 CROSSWHITE J	Haines & Co Publishers
	B 208 CULKOSKY Betty	Haines & Co Publishers
	ESTRADA Maria D	Haines & Co Publishers
	MANN Doyle L	Haines & Co Publishers
	PARKS F R	Haines & Co Publishers
	RAMIREZJullo	Haines & Co Publishers
	RIVERA Marha	Haines & Co Publishers
	ROYBAL Eddie	Haines & Co Publishers
	SAMSEL Peggy	Haines & Co Publishers
	SIMMONSAnna	Haines & Co Publishers
	D 108 WIGHTMAN Mary	Haines & Co Publishers
	B CAPOLINO Mary	Haines & Co Publishers
	COY D ESTES	Haines & Co Publishers
	FULKERSON Jean	Haines & Co Publishers
	B 108 GIBSON N L	Haines & Co Publishers
	HOENISCH Frances	Haines & Co Publishers
	D 206 HUGHES R V	Haines & Co Publishers
	D 201 LOGUE VP	Haines & Co Publishers
	A 115 LOPEZLorenza	Haines & Co Publishers
	D 105 MATTHEWS James E	Haines & Co Publishers
	D 214 MCBRIDE Mildred	Haines & Co Publishers
	D 207 MCMAHAN Terry	Haines & Co Publishers
	C 306 MORENO Rafael	Haines & Co Publishers
	NEEL Katle	Haines & Co Publishers
	D 210 PENLANDMary L	Haines & Co Publishers
	A 117 POPOLILLO William	Haines & Co Publishers
	D 118 RETAJoaquin	Haines & Co Publishers
	A 203 SERRANO E 18ego	Haines & Co Publishers
	A 218 SHRINER Harlan	Haines & Co Publishers
	A 213 SIMON Karolin	Haines & Co Publishers
	D 116 STEPHENS Stella L	Haines & Co Publishers
	A 106 STITES S J	Haines & Co Publishers
	C 101 KERRK	Haines & Co Publishers
	D 208 KORINEK C	Haines & Co Publishers
	COY D ESTES APARTMENTS ALLEN Ralph G	Haines & Co Publishers
	A 205 AMEND H B	Haines & Co Publishers
	D 202 BECK Robed	Haines & Co Publishers
	BERTINO John W	Haines & Co Publishers

FINDINGS

283 N 3RD AVE

Year	Uses	Source
1980	APARTMENT A BRAMLETT MARTH	GTE General Telephone Company of California

289 N 3RD AVE

Year	Uses	Source
1960	Van Tassel Eursel	General Telephone Company Publishers

319 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

321 N 3RD AVE

Year	Uses	Source
2003	LAB CHAPMAN ROBIN DDS	Haines & Co Publishers
	A DENTAL PROSTHETIC	Haines & Co Publishers
	ORTHODONTICS VOLBEDA Dick	Haines & Co Publishers
	UPLAND	Haines & Co Publishers
1995	Building	GTE Directories
	CLELAND THOS E	GTE Directories
	C A DENTAL PROSTHETIC LAB	GTE Directories
	B GRAUE GEO H DODS INC	GTE Directories
1980	BUILDING	GTE General Telephone Company of California
	CLELAND THOS E	GTE General Telephone Company of California
	CLELAND THOS E	GTE General Telephone Company of California
	NRENAN PABLON DENTAL	GTE General Telephone Company of California
	B GRAUE GEO H DDS INC	GTE General Telephone Company of California
1970	BUILDING	General Telephone Company of California
	o CALLOW L W DENTIST	General Telephone Company of California
1960	Callow Lyle W dentist	General Telephone Company Publishers
	Bert and Judson T dentl lab	General Telephone Company Publishers
	Callow Lyle W dentist	General Telephone Company Publishers
	Littleton Edw dntst	General Telephone Company Publishers

342 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

Year	Uses	Source
1970	n UPLAND FEED/FUEL CO	General Telephone Company of California

368 N 3RD AVE

Year	Uses	Source
2003	WONG Song	Haines & Co Publishers
	HENSLEY Gerald P	Haines & Co Publishers
1980	RUUD J R	GTE General Telephone Company of California
1970	RUUD J R	General Telephone Company of California
1960	Dettweiler W F	General Telephone Company Publishers

379 N 3RD AVE

Year	Uses	Source
2003	MITCHELL Thomas	Haines & Co Publishers
1960	Fies Walter J	General Telephone Company Publishers

380 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

381 N 3RD AVE

Year	Uses	Source
1980	COREY DAVID	GTE General Telephone Company of California

388 N 3RD AVE

Year	Uses	Source
1970	MILLER J R	General Telephone Company of California
	CSPNSH TRLS GRL SCT	General Telephone Company of California
1960	Girl Scouts Of Chaffey Community	General Telephone Company Publishers
1940	Chaffey Community Girls Organization Kath A Dawson dir	Los Angeles Directory Co.

389 N 3RD AVE

Year	Uses	Source
2003	SHIRK Marvin	Haines & Co Publishers
1980	HEDRICK H T	GTE General Telephone Company of California
1970	HEDRICK H T	General Telephone Company of California
1960	Hedrick Harry T	General Telephone Company Publishers

FINDINGS

402 N 3RD AVE

Year	Uses	Source
1960	Chase Joe	General Telephone Company Publishers

407 N 3RD AVE

Year	Uses	Source
2003	3RD AV N 9176 CONT MORAN Kevin	Haines & Co Publishers
	MASUCCI Thomas	Haines & Co Publishers

409 N 3RD AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers
	WEALTH CODE	Haines & Co Publishers
1980	EATON LEON	GTE General Telephone Company of California

416 N 3RD AVE

Year	Uses	Source
2003	CANTRELL Lowell	Haines & Co Publishers
1980	B LAPP EDW H	GTE General Telephone Company of California
	A FALABELLA DANTE	GTE General Telephone Company of California
	CANTRELL LOWELL	GTE General Telephone Company of California
	APARTMENT	GTE General Telephone Company of California
1970	B ATCHISON W L	General Telephone Company of California
	A LAPP EDWARD H	General Telephone Company of California
	DRAKE L M	General Telephone Company of California
	APARTMENT	General Telephone Company of California
1960	Hammon Earnest	General Telephone Company Publishers
	Atchison Wm L	General Telephone Company Publishers
	Mikulski Walter A	General Telephone Company Publishers
1940	La Rue Jacob Mabel E	Los Angeles Directory Co.

419 N 3RD AVE

Year	Uses	Source
2003	6 MORRELLMichael	Haines & Co Publishers
1980	STONE D L	GTE General Telephone Company of California

FINDINGS

N 4TH

126 N 4TH

Year	Uses	Source
1945	Esterbrooks E S r	Southern California Telephone Company

140 N 4TH

Year	Uses	Source
1975	Valles Jim L	Pacific Telephone Co
1945	Bulgren Dale A r	Southern California Telephone Company

155 N 4TH

Year	Uses	Source
1945	Johnson O J Dr	Southern California Telephone Company
	Caldwell W J r	Southern California Telephone Company
	Res	Southern California Telephone Company

N 4TH AVE

167 N 4TH AVE

Year	Uses	Source
2003	OMARTI Waller	Haines & Co Publishers
1964	Golgos Michl	Luskey Brothers & Co
1960	Drake C N	General Telephone Company Publishers
1951	Denver LJ	Los Angeles Directory Company Publishers
1946	Anderson Victor	Los Angeles Directory Company Publishers
1938	Ames Jack C	Los Angeles Directory Co.
	Collyer Wm H	Los Angeles Directory Co.

173 N 4TH AVE

Year	Uses	Source
2003	BECERRA Marisol	Haines & Co Publishers
1970	APARTMENT REAR CLARK N L	General Telephone Company of California
1964	Clark Nettie L Mrs	Luskey Brothers & Co
1951	Peax B M Mrs	Los Angeles Directory Company Publishers
1946	Owen Edna M	Los Angeles Directory Company Publishers
1938	Stephenson Julius Marion ranchw&kr	Los Angeles Directory Co.

176 N 4TH AVE

Year	Uses	Source
2003	XXXX	Haines & Co Publishers

FINDINGS

Year	Uses	Source
1995	Thomas Robt	GTE Directories
1985	GASTELUM JUAN	GTE
1964	Catherwood Wm	Luskey Brothers & Co
1951	S howalter 0 E	Los Angeles Directory Company Publishers
1946	Mc Curdy C L	Los Angeles Directory Company Publishers

178 N 4TH AVE

Year	Uses	Source
2003	9TH E	Haines & Co Publishers
	XXXX	Haines & Co Publishers
1970	CLARY MICHAEL	General Telephone Company of California
1951	Badger P W th Intersects	Los Angeles Directory Company Publishers

FINDINGS

TARGET PROPERTY: ADDRESS NOT LISTED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not listed in the research source.

Address Researched	Address Not Listed in Research Source
NA	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

ADJOINING PROPERTY: ADDRESSES NOT LISTED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not listed in research source.

Address Researched	Address Not Listed in Research Source
125 3RD N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
125 N 3RD	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1923, 1922
126 4TH N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
126 N 4TH	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
131 4TH N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
135 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
140 4TH N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
140 N 4TH	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
145 3RD N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
145 N 3RD	2003, 2002, 1996, 1995, 1990, 1985, 1981, 1980, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1923, 1922
148 N 3RD AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
149 N 3RD AVE	2002, 1996, 1995, 1991, 1985, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
151 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
151 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
152 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
155 3RD N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
155 4TH N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
155 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
155 N 4TH	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
156 2ND N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
156 3RD N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
156 4TH N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
156 N 2ND	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1923, 1922
157 N 2ND	2003, 2002, 1996, 1995, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
158 2ND N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1926, 1923, 1922
158 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1922
158 N 2ND	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
159 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
159 N 3RD	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
160 E C ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
161 N 2ND AVE	2002, 1996, 1991, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
162 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
163 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
164 N 2ND AVE	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
165 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
166 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
167 4TH AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1922
167 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
167 N 3RD AVE	2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
167 N 4TH AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
170 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
170 E C ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
170 N 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
171 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
171 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
171 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
172 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
172 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
173 4TH AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1922
173 N 4TH AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1961, 1960, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
174 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
175 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
175 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
175 N 2ND AVE	2002, 1996, 1991, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
176 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
176 N 2ND AVE	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1961, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
176 N 4TH AVE	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
177 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1923, 1922
177 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
177 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
177 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
178 N 4TH AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
179 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
180 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
180 4TH AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1922
180 E C ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
180 N 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
181 N 2ND AVE	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
182 N 2ND AVE	2002, 1996, 1995, 1991, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
183 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
184 N 2ND	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
184 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
185 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
185 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
186 N 2ND AVE	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
187 N 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
187 N 3RD AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
188 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
188 N 2ND AVE	2003, 2002, 1996, 1991, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
190 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
190 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
191 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
191 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1936, 1934, 1931, 1930, 1926, 1923, 1922
192 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
195 N 2ND AVE	2002, 1996, 1991, 1981, 1980, 1975, 1965, 1961, 1955, 1950, 1949, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
195 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
196 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
197 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
199 N 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
200 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
201 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
201 E C ST	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
202 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
203 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
204 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
204 E C ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
204 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
205 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
205 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
205 E C ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
205 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
206 E C ST	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
207 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
208 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
208 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
208 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
209 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
210 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
215 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
215 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
216 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
216 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
216 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
217 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
218 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
218 E C ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
218 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
220 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
220 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
220 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
221 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
222 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
224 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
225 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
226 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
228 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
228 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
228 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
229 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
229 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
230 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1930, 1926, 1922
231 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
232 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
232 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
233 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
234 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
235 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
235 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
236 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
236 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
237 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
237 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
238 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
240 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
240 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
240 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
241 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
241 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
241 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
242 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
242 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
243 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
243 E 9TH ST	2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
244 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
246 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
247 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
247 E 9TH ST	2002, 1996, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
247 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
250 E C ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
250 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
250 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
251 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
251 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
254 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
256 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
257 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
257 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
258 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
258 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
260 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
260 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
260 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
260 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
261 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
261 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
262 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
263 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
263 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
263 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
265 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
267 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
267 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
267 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
267 D ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
267 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
267 E D ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
267 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
268 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
270 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
270 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
271 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
271 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
271 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
272 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
273 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
274 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
275 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
275 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
276 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
276 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
278 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
279 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
279 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
279 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
280 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
280 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
281 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
282 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
282 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
283 3RD AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
283 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
284 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
284 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
285 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
287 E D ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
289 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
289 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
289 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
290 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
291 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
291 D ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
291 E C ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
291 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
294 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
295 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
295 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
296 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
296 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
299 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
299 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
301 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
304 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
305 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
305 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
305 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
305 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
306 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
308 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
310 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
311 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
312 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
313 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
313 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
313 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
313 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
316 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
317 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
319 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
319 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
321 3RD AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
321 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
321 N 3RD AVE	2002, 1996, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
322 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
323 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
323 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
324 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
325 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
325 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
326 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
327 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
329 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
329 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
329 E C ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
330 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
330 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
330 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
333 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
333 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
335 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
337 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
337 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
338 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
338 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
341 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
342 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
343 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
343 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
345 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
346 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
350 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
351 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
352 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
352 E C ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
354 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
355 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
356 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
357 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
363 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
364 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
364 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
365 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
367 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
368 N 2ND AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
368 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
369 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
370 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
371 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
371 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
372 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
372 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
372 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
373 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
374 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
374 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
376 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
376 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
376 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
377 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
378 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
378 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
379 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
379 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
380 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
380 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
381 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
381 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
382 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
384 2ND AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
384 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
384 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
386 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
386 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
386 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
387 2ND AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
387 N 2ND AVE	2003, 2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
388 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
388 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
389 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
389 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
390 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
390 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
390 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
390 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
391 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
391 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
392 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
392 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
392 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
393 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
394 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
394 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
394 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
395 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
396 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
397 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
397 E D ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
398 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
398 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
399 D	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
399 D ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
399 D ST N	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
402 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
402 E C ST	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
402 N 3RD AVE	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
404 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
405 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
406 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1922
407 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
407 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
409 3RD AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
409 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
410 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
410 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
414 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
414 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
415 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
416 3RD AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
416 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
416 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
417 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
419 3RD AVE N	2003, 2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
419 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
419 N 3RD AVE	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
420 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
421 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
421 E 9TH ST	2002, 1996, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
424 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
427 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
429 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
430 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
432 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
434 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
436 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
438 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
439 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
442 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
449 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
450 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
450 D ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
450 E D ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
451 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922
452 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
454 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
454 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
455 C ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
456 D	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
456 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
463 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
474 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
475 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
476 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
483 E 9TH ST	2003, 2002, 1996, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
490 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922
491 E 9TH ST	2002, 1996, 1991, 1990, 1981, 1980, 1975, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1930, 1926, 1922
504 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1922

FINDINGS

Address Researched	Address Not Listed in Research Source
505 E 9TH ST	2002, 1996, 1995, 1991, 1990, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1938, 1936, 1934, 1931, 1930, 1926, 1923, 1922
507 E 9TH ST	2003, 2002, 1996, 1995, 1991, 1990, 1985, 1981, 1980, 1975, 1970, 1965, 1964, 1961, 1960, 1956, 1955, 1951, 1950, 1949, 1946, 1945, 1942, 1941, 1940, 1938, 1936, 1934, 1930, 1926, 1923, 1922

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

MOBIL STATION (T0607100250) - (MAP)

204 N EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 92012*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602050T*
CASEWORKER: *ROSE SCOTT*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/30/1992

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

SCHEU PRODUCTS (T0607100306) - (MAP)

297 E STOWELL
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 93046*
CASEWORKER: *BETTI MACGREGOR*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602371T*
CASEWORKER: *VALERIE JAHN-BULL*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/5/1994

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
4/5/1994	Completed - Case Closed
9/3/1993	Open - Case Begin Date
9/3/1993	Open - Site Assessment

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
OTHER REGULATORY ACTIONS	4/5/1994	Closure/No Further Action Letter
LEAK ACTION	9/14/1993	Leak Reported
LEAK ACTION	9/3/1993	Leak Discovery
LEAK ACTION	9/3/1993	Leak Stopped
CLEANUP ACTION	8/31/1993	Excavate and Dispose

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

SCHEU PRODUCTS (T0607100306) - (MAP)

297 E STOWELL
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 93046*
CASEWORKER: *BETTI MACGREGOR*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602371T*
CASEWORKER: *VALERIE JAHN-BULL*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/5/1994

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UNOCAL #5142 (T0607100123) - (MAP)

502 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 87065*
CASEWORKER: *HERMAN MCKETHAN*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083601102T*
CASEWORKER: *NANCY OLSON-MARTIN*

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/7/1989

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
4/7/1989	Completed - Case Closed
2/28/1989	Open - Remediation
12/15/1988	Open - Site Assessment
11/15/1988	Open - Case Begin Date

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UNOCAL #5142 (T0607100123) - (MAP)

502 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 87065*
CASEWORKER: *HERMAN MCKETHAN*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083601102T*
CASEWORKER: *NANCY OLSON-MARTIN*

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI)
Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/7/1989

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
4/7/1989	Completed - Case Closed
2/28/1989	Open - Remediation
12/15/1988	Open - Site Assessment
11/15/1988	Open - Case Begin Date

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
CLEANUP ACTION	2/28/1989	Excavate and Dispose
LEAK ACTION	11/22/1988	Leak Reported
LEAK ACTION	11/15/1988	Leak Discovery
LEAK ACTION	11/15/1988	Leak Stopped

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UNOCAL #5142 (T0607100123) - (MAP)

502 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 87065*
CASEWORKER: *HERMAN MCKETHAN*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083601102T*
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Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/7/1989

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

PATRIOT GAS (T0607100631) - (MAP)

720 E 9TH ST
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 99114*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836036427*
CASEWORKER: *ROSE SCOTT*
CUF Claim #: 16141
CUF Amount Paid: $229,381

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI)
Site Maps / Documents | Community Involvement | LUST Fund Data

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/20/2005

POTENTIAL CONTAMINANTS OF CONCERN
FUEL OXYGENATES, GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
6/20/2005	Completed - Case Closed
9/4/2002	Open - Remediation
10/30/2000	Open - Site Assessment
9/9/1999	Open - Site Assessment
12/10/1998	Open - Case Begin Date
12/10/1998	Open - Site Assessment

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

PATRIOT GAS (T0607100631) - (MAP)

720 E 9TH ST
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 99114*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836036427*
CASEWORKER: *ROSE SCOTT*
CUF Claim #: 16141
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Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI)
Site Maps / Documents | Community Involvement | LUST Fund Data

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/20/2005

POTENTIAL CONTAMINANTS OF CONCERN
FUEL OXYGENATES, GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
6/20/2005	Completed - Case Closed
9/4/2002	Open - Remediation
10/30/2000	Open - Site Assessment
9/9/1999	Open - Site Assessment
12/10/1998	Open - Case Begin Date
12/10/1998	Open - Site Assessment

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
OTHER REGULATORY ACTIONS	6/30/2005	Technical Correspondence / Assistance / Other
CLEANUP ACTION	9/4/2002	Vacuum Extract
LEAK ACTION	9/9/1999	Leak Reported
LEAK ACTION	12/10/1998	Leak Discovery
LEAK ACTION	12/10/1998	Leak Stopped

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COUNTY FIRE DEPARTMENT

COUNTY OF SAN BERNARDINO
ECONOMIC DEVELOPMENT/
PUBLIC SERVICES GROUP

OFFICE OF THE FIRE MARSHAL
HAZARDOUS MATERIALS DIVISION
620 South "E" Street • San Bernardino, CA 92415-0153
(909) 386-8401 • Fax (909) 386-8460

PETER R. HILLS
Fire Chief
County Fire Warden

JUN 2 0 2005

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
3737 MAIN STREET, SUITE 500
RIVERSIDE, CALIFORNIA 92501-3339

ATTENTION: ROSE SCOTT

SUBJECT: LOCAL OVERSIGHT PROGRAM CASE CLOSURE SUMMARY
LOP SITE #99114

Pursuant to requirements of the Department's Local Oversight Program contract with the State Water Board, please find enclosed the "Case Closure Summary" for the following site within your jurisdiction.

Former Patriot Gas Station
720 East 9th Street
Upland, CA 91786
Lustis #083603642T

As you are aware, conditions of the contract require a 30 day review period in which your agency may reject the recommended closure or request additional time. Therefore, without objection, the Department will issue the standardized "Remedial Action Completion Certification" 35 days after the date of this correspondence.

Please contact Lisa Holst of this office at (909) 386-8419 if you have any questions.

RONALD A. RIPLEY, R.E.H.S.
SUPERVISING ENVIRONMENTAL HEALTH SPECIALIST
HAZARDOUS MATERIALS MANAGEMENT
SITE REMEDIATION/LOCAL OVERSIGHT PROGRAM

MARK H. UFFER
County Administrative Officer

NORMAN A. KANOLD
Assistant County Administrator
Economic Development/
Public Services Group

Board of Supervisors
BILL POSTMUS ..... First District
PAUL BIANE ..... Second District
DENNIS HANSBERGER ..... Third District
GARY C. OVITT ..... Fourth District
JOSIE GONZALES ..... Fifth District

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

I. Agency Information

Date: JUN 2 0 2005

Agency Name San Bernardino County Fire Department Hazardous Materials Division	Address 620 South "E" Street
City/State/Zip San Bernardino, CA 92415-0153	Phone (909) 386-8419
Responsible Staff Person Lisa Holst	Title Environmental Health Specialist II

II. Case Information

Site Facility Name
Former Patriot Gas Station

Site Facility Address
720 East 9th Street, Upland, CA 91786

RB LUSTIS Case No. 083603642T	Local Case No. 99114	LOP Case No. 99114
URF Filing Date 9/9/99	SWEEPS No. NA	

Responsible Parties	Address	Phone Numbers
Patriot Gas Corporation Attention: Akbar Hosseini	1703 North 3rd Avenue, Upland, CA 91786	(909) 982-9517

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed?	Date
1	12,000	gasoline	removed	12/10/98
2	12,000	gasoline	removed	12/10/98
3	10,000	gasoline	removed	12/10/98
4				

III. Release and Site Characterization Information

Cause and type of release:
Unknown

Site characterization complete? ☒Yes ☐No	Date approved by oversight agency: 3/23/05		
Monitoring wells installed? ☐Yes ☒No	Number:	Proper screened interval? ☐Yes ☐No	
Highest groundwater depth below ground surface: Estimated at approximately 540 feet bgs.	Lowest depth: Approximately 600 feet bgs.	Flow direction: South	
Most sensitive current use: Municipal			
Are drinking water wells affected? ☐Yes ☒No	Aquifer Name: Upper Chino Basin		

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

III. Release and Site Characterization Information (continued)

Is surface water affected? ☐Yes ☒No	Nearest/affected surface water name:

Off-site beneficial use impacts (addresses/locations):
None

Report(s) on file? ☒Yes ☐No	Where is report filed? San Bernardino County Fire Dept Hazardous Materials Division

Treatment and Disposal of Affected Material

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	3 UST's	Pacific Coast Recycling, El Monte, CA	12/10/98
Piping			
Free Product			
Soil			
Ground Water			
Barrels			

Maximum Documented Contaminant Concentrations ------- Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	3580	ND			Xylene	299	ND		
TPH (Diesel)					Ethylbenzene	41.9	ND		
Benzene	2.2	ND			Oil & Grease				
Toluene	75	ND			Heavy Metals				
Other					MTBE	25.3	0.018		

Comments (Depth of Remediation, etc.):
Petroleum hydrocarbon soil contamination was discovered beneath the dispenser islands during UST removal activity. Six soil borings (B-1 thru B-6) defined the vertical and lateral extent of contamination adequately. A soil vapor extraction (SVE) system comprised of two vapor wells (B-4 and B-5) and two aeration wells (B-8 and B-9) operated from 4/2/03 to 7/23/04. A total of 1,245 pounds of hydrocarbons were removed and destroyed. A SVE rebound test demonstrated that hydrocarbon concentrations in the vapor stream had reached asymptotic levels. (see section VII)

IV. Closure

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? ☒Yes ☐No

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? ☒Yes ☐No

Does corrective action protect public health for current land use? ☒Yes ☐No

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

Former Patriot Gas Station, 720 East 9th Street, Upland, CA LOP Site # 99114 SBCFD FAX (909) 386-8460

Site Management requirements: None

Should corrective action be reviewed if land use changes? ☐Yes ☒No

Monitoring wells decommissioned: ☐Yes ☐No (Vapor wells B-4, B-5, B-8, and B-9 will be destroyed prior to case closure.)	Number Decommissioned:	Number retained:

List enforcement actions taken: Notice of Requirement to Reimburse

Notice of Violation

List enforcement actions rescinded: NONE

Responsible Party complied with directives listed in Notice of Violation.

V. Local Agency Representative Data

RW

Name: Peter S. Brierty Title: Fire Marshal

Signature: Peter Brierty

VI. RWQCB Notification

Date Submitted to RB: RB Response:

RWQCB Staff Name: Ken Williams, C.E.G. Title: Senior Engineering Geologist Date:

VII. Additional Comments, Data, etc.

One confirmation boring, CB-1, showed non-detect results with the exception of trace amounts of MTBE and TBA at two sample intervals. Case closure is recommended for the following reasons:

The vertical and lateral extent of gasoline compounds in the soil has been adequately assessed, and remediation by SVE operated to the point of diminishing returns. A public drinking water well (City of Upland well #7A) is located approximately 700 feet southwest of the site. However, any residual concentrations of fuel oxygenates that may remain in the soil should pose no significant threat to public health, the environment, or to groundwater that is reported at approximately 540 to 600 feet bgs.

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

PATRIOT GAS (T0607100631) - (MAP)

720 E 9TH ST
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 99114*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836036427*
CASEWORKER: *ROSE SCOTT*
CUF Claim #: 16141
CUF Amount Paid: $229,381

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement LUST Fund Data

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/20/2005

POTENTIAL CONTAMINANTS OF CONCERN
FUEL OXYGENATES, GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

AMPAC (T0607100089) - (MAP)

1975 BENSON AVE.
UPLAND, CA 91785
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 87069*
CASEWORKER: *WALT FROGLIA*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083600829T*
CASEWORKER: *VALERIE JAHN-BULL*

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 7/25/1988

POTENTIAL CONTAMINANTS OF CONCERN
OTHER SOLVENT OR NON-PETROLEUM HYDROCARBON

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
7/25/1988	Completed - Case Closed
6/8/1988	Open - Remediation
7/20/1987	Open - Case Begin Date
7/20/1987	Open - Site Assessment

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

AMPAC (T0607100089) - (MAP)

1975 BENSON AVE.
UPLAND, CA 91785
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 87069*
CASEWORKER: *WALT FROGLIA*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836008291*
CASEWORKER: *VALERIE JAHN-BULL*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 7/25/1988

POTENTIAL CONTAMINANTS OF CONCERN
OTHER SOLVENT OR NON-PETROLEUM HYDROCARBON

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
7/25/1988	Completed - Case Closed
6/8/1988	Open - Remediation
7/20/1987	Open - Case Begin Date
7/20/1987	Open - Site Assessment

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
OTHER REGULATORY ACTIONS	7/25/1988	Closure/No Further Action Letter
CLEANUP ACTION	6/8/1988	Excavate and Treat
LEAK ACTION	3/8/1988	Leak Reported

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

AMPAC (T0607100089) - (MAP)

1975 BENSON AVE.
UPLAND, CA 91785
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 87069*
CASEWORKER: *WALT FROGLIA*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083600829T*
CASEWORKER: *VALERIE JAHN-BULL*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 7/25/1988

POTENTIAL CONTAMINANTS OF CONCERN
OTHER SOLVENT OR NON-PETROLEUM HYDROCARBON

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

G & M OIL SS #22 (T0607100395) - (MAP)

159 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 95043*
CASEWORKER: *CURTIS BRUNDAGE*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836027417*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 11309
CUF Amount Paid: $20,640

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/29/2004

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
4/29/2004	Completed - Case Closed
2/17/1999	Open - Remediation
2/17/1999	Open - Site Assessment
8/4/1995	Open - Case Begin Date
8/4/1995	Open - Site Assessment

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
CLEANUP ACTION	2/17/1999	Excavate and Dispose
LEAK ACTION	8/28/1995	Leak Reported
LEAK ACTION	8/4/1995	Leak Discovery

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COUNTY FIRE DEPARTMENT

COUNTY OF SAN BERNARDINO
ECONOMIC DEVELOPMENT
AND PUBLIC SERVICES GROUP

OFFICE OF THE FIRE MARSHAL
HAZARDOUS MATERIALS DIVISION
620 South "E" Street • San Bernardino, CA 92415-0153
(909) 386-8401 • Fax (909) 386-8460

PETER R. HILLS
Fire Chief
County Fire Warden

REMEDIAL ACTION COMPLETION CERTIFICATION

APR 2 9 2004

G & M OIL COMPANY **SITE # 95043**
16868 A STREET
HUNTINGTON BEACH, CA 92647

ATTENTION: JENNIFER TALBERT

SUBJECT: UNDERGROUND STORAGE TANK (UST) CASE CLOSURE FOR G & M OIL #22, 159 SOUTH EUCLID, UPLAND, CA

UNAUTHORIZED RELEASE REPORT DATED 8/4/95

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office at (909) 386-8419 if you have any questions regarding this matter.

Peter Brierty

PETER S. BRIERTY, DIVISION CHIEF
HAZARDOUS MATERIALS DIVISION
CB :lld

cc: Ken Williams, Santa Ana Regional Water Quality Control Board
Nancy Comacho, State Water Resources Control Board

WALLY HILL
County Administrative Officer

Board of Supervisors
BILL POSTMUS ..... First District
PAUL BIANE ..... Second District
DENNIS HANSBERGER ..... Third District
PATTI AGUIAR ..... Fourth District
CLIFFORD O. YOUNG ..... Fifth District

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

I. Agency Information

Date: MAR 17 2004

Agency Name San Bernardino County Fire Department Hazardous Materials Division	Address 620 South E Street
City/State/Zip San Bernardino, CA 92415-0153	Phone (909) 386-8419
Responsible Staff Person Curtis Brundage	Title Environmental Health Specialist III

II. Case Information

Site Facility Name
G & M Oil # 22

Site Facility Address
159 South Euclid, Upland

RB LUSTIS Case No.	Local Case No. 95043	LOP Case No. 95043
URF Filing Date 8-4-95	SWEEPS No.	

Responsible Parties	Address	Phone Numbers
G&M Oil Company	16868 A Street	714-375-4700
Attention: Jennifer Talbert	Huntington Beach, CA 92647	

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed?	Date
1				
2				
3				
4				

III. Release and Site Characterization Information

Cause and type of release:
Piping release

Site characterization complete? ☒Yes ☐No	Date approved by oversight agency: 7-30-99	
Monitoring wells installed? ☐Yes ☒No	Number:	Proper screened interval? ☐Yes ☐No
Highest groundwater depth below ground surface: >500'	Lowest depth: unknown	Flow direction:
Most sensitive current use: municipal		
Are drinking water wells affected? ☐Yes ☒No	Aquifer Name: Chino basin	

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

III. Release and Site Characterization Information (continued)

Is surface water affected? ☐Yes ☒No	Nearest/affected surface water name: Santa Ana River
Off-site beneficial use impacts (addresses/locations): Municipal, residential	
Report(s) on file? ☒Yes ☐No	Where is report filed? San Bernardino County Fire Dept Hazardous Materials Division

Treatment and Disposal of Affected Material

Material	Amount (Include Units)	Action (Treatment or Disposal w/Desination)	Date
Tank			
Piping			
Free Product			
Soil	162.56 tons	Recycled at TPS	8/17/95
Ground Water			
Barrels			

Maximum Documented Contaminant Concentrations ------- Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	17,000	35			Xylene	2900	0.61		
TPH (Diesel)	24,600	1160			Ethylbenzene	505	0.014		
Benzene	65	ND			Oil & Grease				
Toluene	1700	0.006			Heavy Metals				
Other					MTBE	1270	ND		

Comments (Depth of Remediation, etc.):

The site has over-excavated approximately 163 tons of contaminated soil. The soil has been recycled at the TPS facility in Adelanto, CA. The after concentrations represent soil concentrations following excavation and characterization.

IV. Closure

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? ☒Yes ☐No

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? ☒Yes ☐No

Does corrective action protect public health for current land use? ☒Yes ☐No

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

G&M Oil # 22, 159 S. Euclid, Upland SITE # 95043

Site Management requirements: None

Should corrective action be reviewed if land use changes? ☐Yes ☒No

Monitoring wells decommissioned: ☐Yes ☐No	Number Decommissioned:	Number retained:

List enforcement actions taken: Notice of Requirement to Reimburse

List enforcement actions rescinded: NONE

V. Local Agency Representative Data

RAM

Name: Peter S. Brierty Title: Division Chief

Signature: Peter Brierty

VI. RWQCB Notification

Date Submitted to RB: RB Response: Concurs w/ Closure

RWQCB Staff Name: Kenneth R Williams Title: Chief, UST Section Date: 4/19/04

VII. Additional Comments, Data, etc.

During the upgrade activities for the piping and dispensers, hydrocarbon contamination was discovered. Subsequently, a site investigation was required. Soil samples were collected from beneath the piping and dispensers. The results indicated significant concentrations of TPH, BTEX and MTBE. Following these activities, contaminated soil was removed and recycled at TPS in Adelanto. Additional assessment was required to adequately characterize the soil contamination. Borings were installed around and beneath the USTs and adjacent to the dispensers. The results indicate no significant concentration at depth. The residual contaminants remain within the UST excavation and beneath the diesel dispenser. Due to virtually no migration of contaminants and the depth to groundwater (approximately 500' bgs), the Department recommends closure with no further action.

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

G & M OIL SS #22 (T0607100395) - (MAP)

159 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 95043*
CASEWORKER: *CURTIS BRUNDAGE*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836027417*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 11309
CUF Amount Paid: $20,640

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/29/2004

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UPLAND GAS UP (T0607100466) - (MAP)

177 E ARROW HWY
UPLAND, CA 91730
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 98002*
CASEWORKER: *JACKSON CRUTSINGER*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603122T*
CASEWORKER: *CARL BERNHARDT*
CUF Claim #: 12967
CUF Amount Paid: $4,773

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 2/5/1999

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
2/5/1999	Completed - Case Closed
12/10/1997	Open - Case Begin Date

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UPLAND GAS UP (T0607100466) - (MAP)

177 E ARROW HWY
UPLAND, CA 91730
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 98002*
CASEWORKER: *JACKSON CRUTSINGER*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603122T*
CASEWORKER: *CARL BERNHARDT*
CUF Claim #: 12967
CUF Amount Paid: $4,773

Summary | Cleanup Status History | **Regulatory Activities** | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 2/5/1999

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
2/5/1999	Completed - Case Closed
12/10/1997	Open - Case Begin Date

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
OTHER REGULATORY ACTIONS	2/5/1999	Closure/No Further Action Letter
LEAK ACTION	2/3/1998	Leak Reported
LEAK ACTION	12/10/1997	Leak Discovery

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

UPLAND GAS UP (T0607100466) - (MAP)

177 E ARROW HWY
UPLAND, CA 91730
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 98002*
CASEWORKER: *JACKSON CRUTSINGER*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083603122T*
CASEWORKER: *CARL BERNHARDT*
CUF Claim #: 12967
CUF Amount Paid: $4,773

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 2/5/1999

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

TERRY'S SHELL (T0607100320) - (MAP)

183 E FOOTHILL BLVD
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 92016*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836024301*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 5218
CUF Amount Paid:

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI)
Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 10/27/2000

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
10/27/2000	Completed - Case Closed
3/22/1989	Open - Case Begin Date

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
OTHER REGULATORY ACTIONS	10/27/2000	Closure/No Further Action Letter
LEAK ACTION	1/12/1994	Leak Reported

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

TERRY'S SHELL (T0607100320) - (MAP)

183 E FOOTHILL BLVD
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 92016*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836024301*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 5218
CUF Amount Paid:

Summary **Cleanup Status History** **Regulatory Activities** **Environmental Data (ESI)**
Site Maps / Documents **Community Involvement**

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 10/27/2000

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

ARCO (T0607100512) - (MAP)

193 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 98059*
CASEWORKER: *CATHERINE RICHARDS*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836032847*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 15602
CUF Amount Paid: $12,853

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/10/2001

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
4/10/2001	Completed - Case Closed
8/27/1998	Open - Case Begin Date

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

ARCO (T0607100512) - (MAP)

193 S EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 98059*
CASEWORKER: *CATHERINE RICHARDS*
SANTA ANA RWQCB (REGION 8) - *CASE #: 0836032847*
CASEWORKER: *VALERIE JAHN-BULL*
CUF Claim #: 15602
CUF Amount Paid: $12,853

Summary **Cleanup Status History** **Regulatory Activities** **Environmental Data (ESI)**
Site Maps / Documents **Community Involvement**

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 4/10/2001

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

MOBIL STATION (T0607100250) - (MAP)

204 N EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD) - CASE #: 92012*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602050T*
CASEWORKER: *ROSE SCOTT*

Summary | Cleanup Status History | Regulatory Activities | Environmental Data (ESI) | Site Maps / Documents | Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/30/1992

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
6/30/1992	Completed - Case Closed
3/8/1988	Open - Case Begin Date

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

MOBIL STATION (T0607100250) - (MAP)

204 N EUCLID AVE
UPLAND, CA 91786
SAN BERNARDINO COUNTY
LUST CLEANUP SITE

CLEANUP OVERSIGHT AGENCIES
SAN BERNARDINO COUNTY LOP *(LEAD)* - *CASE #: 92012*
CASEWORKER: *LISA HOLST*
SANTA ANA RWQCB (REGION 8) - *CASE #: 083602050T*
CASEWORKER: *ROSE SCOTT*

Summary Cleanup Status History Regulatory Activities Environmental Data (ESI)
Site Maps / Documents Community Involvement

Regulatory Profile

CLEANUP STATUS
COMPLETED - CASE CLOSED AS OF 6/30/1992

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA AFFECTED
SOIL

FILE LOCATION
LOCAL AGENCY

Site History

No site history available

Cleanup Status History

DATE	STATUS
6/30/1992	Completed - Case Closed
3/8/1988	Open - Case Begin Date

Regulatory Activities

ACTION TYPE	ACTION DATE	ACTION
LEAK ACTION	3/8/1988	Leak Discovery
LEAK ACTION	3/8/1988	Leak Reported
LEAK ACTION	3/8/1988	Leak Stopped

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APPENDIX I
Public Service/Utility Correspondence

CITY OF UPLAND POLICE DEPARTMENT

May 6, 2010

Ms. Starla Barker

14725 Alton Parkway

Irvine, CA 92618

Dear Ms. Barker,

This letter is in response to the questionnaire you sent to me regarding police services in the Historic Downtown Upland area. Please do not hesitate to contact me if you have any questions or problems.

1. Please indicate the location of the police or sheriff station that serves the project area.

   Upland Police Department
   1499 W. 13th St.
   Upland, CA 91786

2. What is the geographical area and total population which is served by the station?

   15.3 square miles
   77,461 population (2008 estimate)

3. How many law enforcement officers and patrol cars presently serve the project area vicinity?

   The majority of the project area is served by two beat officers per shift. The portion of the project area west of Euclid Avenue is served by two additional officers per shift. All of the beat officers are responsible for areas much larger than the project area. Additionally, both areas are served by a field supervisor and a watch commander at all times. As with the beat officers, the field supervisor and watch commander have much broader responsibilities than just the project area.

4. What is the approximate response time to the project site?

STEVE ADAMS ♦ CHIEF OF POLICE
1499 WEST 13TH STREET ♦ UPLAND, CALIFORNIA 91786 ♦ (909) 946-7624 ♦ FAX (909) 920-0105

The Upland Police Department categorizes calls for service by priority level. Priority 1 calls are in-progress emergencies where there is an immediate threat to life or an immediate need for assistance, in-progress or just-occurred suspected felony crimes, or immediate physical threats to persons. This includes calls of suspicious nature that indicate a likely felony crime in progress or violent act. Priority 2 calls are in-progress or just-occurred serious misdemeanor crimes, or felony crimes which have occurred with a delay of 10 to 20 minutes prior to the time the call was received. They also include suspicious circumstances, persons and vehicles. Additional priorities from 3 to 6 are assigned to calls for service in relation to the severity of the nature of the call and the importance of a rapid response.

We have no way of determining response times to the project area alone but the City wide average response times for priority 1 calls for 2009 was 5 minutes, 34 seconds. The City wide average response time for priority 2 calls for the same period was 15 minutes, 45 seconds. We do not track response times for lower priority calls.

5. Do you anticipate any significant impacts from the project on current service around the project area, such as increasing service calls or the need for additional manpower or patrol cars? Please provide generation factors if it is determined that additional manpower or patrol cars are required.

   At build out this project would add approximately 2,848 to 3,124 people to the City of Upland population. This number is derived from the project projections of a net gain of 1,032 to 1,132 households and the California average of 2.76 people per household. Using the historical City of Upland ratio of 1.3 police officers for every 1,000 people, the Upland Police Department should be gradually increased by four sworn police officers in order to effectively service this population increase. This increase would allow the Department to absorb the increased call for service volume this added residential population would bring as well as the calls for service resulting from the additional retail space and the additional business existing retail spaces would have.

   I am proposing that we add one police officer position once 250 additional housing units have been added. Once 500 housing units have been added I propose we add a second police officer position. Once 750 housing units have been added I propose we add a third police officer position. Once 1000 housing units have been added I propose we add the fourth police officer position. By following this plan we gradually increase staffing

rather than facing the need to absorb the full expense at once. Further, the officers are only added as the need arises. Adding officers based on additional housing units makes more sense than developing a timeline which would potentially cause us to add officers before they are needed if the development proceeds at a slower pace than planned. Alternatively, if the development proceeds at a faster pace than originally planned a timeline may prevent us from hiring new officers at the time they are needed.

6. Do you have any required or recommended mitigation measures for significant impacts of the project?

   The projects should be designed and built with crime prevention through environmental design (CPTED) in mind.

7. Is there any other relevant information regarding significant projects impacts?

   No

8. Do you anticipate that project implementation would result in the need for physical additions to your agency (i.e., construction of new police stations)?

   No

Sincerely,

Steve Adams
Chief of Police

FIRE SERVICE
QUESTIONNAIRE

Please respond to the following questions on your agency/company letterhead and provide maps to illustrate facility locations.

1. Please indicate the name and location of the fire station(s) that serve the project area. Also, indicate the equipment, personnel, and emergency medical services available at each station.

Fire Station 161 – 475 N. Second Ave – 3 person engine company – Paramedic Level
Fire Station 162 – 2046 San Antonio Ave – 3 person engine company – Paramedic Level
Fire Station 163 – 1350 Benson Ave – 3 person engine company – Paramedic Level
Fire Station 164 – 1825 N. Campus Ave – 3 person ladder truck – Paramedic Level
EMS Station 165 – 1257 N. Airport – Emergency Service Air Ambulance – RN/Paramedic Level

2. What is the approximate response time to the project site from each station?

Fire Station 161 – 3 minutes
Fire Station 162 – 5 minutes
Fire Station 163 – 8 minutes
Fire Station 164 – 5 minutes
EMS Station 165 – 5 minutes

3. Please indicate any assessment fees required for the project.

Dependent on scope of project at build out – however its looks at build out we will need additional staffing at Fire Station 161 with an additional piece of fire equipment.

4. Do you anticipate that required fees and taxes provided by the project will adequately mitigate the expected increase in fire and emergency medical service demand?

Yes, based on what is being proposed, we do anticipate fees and taxes may mitigate this project

5. Do you require or recommend any additional mitigation measures?

Unknown, we need to find out what the final build out – at build out required staffing and equipment to match impact of increased c all volume and special circumstances.

6. Please indicate the present ISO rating of the site and any fire hazard impacts of the project (will the ISO rating remain the same)?

ISO rating of Class 2 throughout the entire City – This project may impact the ISO rating in the project area, since the requirements under ISO may require additional fire suppression measures.

7. Is there any other relevant information regarding potential significant project impacts?

None

8. Do you anticipate that project implementation would result in the need for physical additions to your agency (i.e., construction of new fire stations)?

Possible addition to Fire Station 161 – if additional personnel are needed.

Upland Public Library
450 North Euclid Avenue
Upland, CA 91786-4732
Telephone (909) 931-4200
Facsimile (909) 931-4209
www.uplandpl.lib.ca.us

May 11, 2010

RBF Consulting
P.O. Box 57057
Irvine, CA
Attn: Starla Barker

Re: **Historic Downtown Upland Specific Plan Environmental Impact Report**

Dear Ms. Barker,

Here are the Library Service Questionnaire responses for the Downtown Specific Plan:

1. The City's only library is located at 450 N. Euclid Ave on the corner of Euclid Ave. and D St.
2. This facility serves the entire City of Upland.
3. The Library building is 25,000 square feet and houses 160,000 titles and 16 public access computers.
4. We do not have, nor does the State of California have official standards for size or number of materials per capita. However, in comparison to other California libraries serving similarly sized communities, Upland ranks poorly. Statistics for the number of books held, expenditures for library materials, and number of public access computers all place us squarely in the bottom third. Growth and expansion in these areas are currently constrained by the budget, physical space and infrastructure.
5. There are no library-specific developer fees.
6. With more adults and more businesses moving into the neighborhood, there come more opportunities for community outreach and partnerships, greater demand for community-centered and adult-geared programs and services, more public requests for meeting/presentation spaces and expectations for more open hours, especially evening hours. Competition for parking will most certainly increase.

Kathy Bloomberg-Rissman
Library Director

PARK AND RECREATIONAL FACILITIES QUESTIONNAIRE

1. Please indicate the location of the facilities which serve the project area. (Please include the distance from the site and size of the facility).

   The following facilities and parks are located within the project area:

   Gibson Senior Center
   250 N. 3rd (3rd and C Street)
   Approximately 13,600 square feet

   Olivedale Park
   8th Street just west of Campus Avenue
   6.5 acres

   Because of their proximity to the project area, the following parks may also be impacted by this project:

   Fern Reservoir Park
   8th Street between Euclid Avenue and San Antonio Avenue
   1 acre

   8th Street Reservoir Park (Warders and Hawkins Fields)
   8th Street just east of Campus Avenue
   5 acres

   Memorial Park
   1200 Foothill Blvd (off Hospital Park Way between Foothill Blvd and San Bernardino Road)
   40 acres

2. What are the generation factors for the proposed land use?

   The National Recreation and Parks Association standard for estimating park acreage needs is 10 park acres for every 1000 residents. Given that formula, 1 park acre would be needed to serve the estimated population growth resulting from this development.

3. Do you anticipate impacts to the park and recreational facilities?

   Yes. Based on the high density of the proposed development, it is estimated that approximately 3,600 new residents will require recreational services. The current demographic statistics for Upland residents would suggest that of those 3,600, between 900-1200 would be youth under the age of 18. Additionally we would anticipate that 1000 would be seniors over the age of 50;

350 of those over the age of 65. These two groups are primary users of the recreational facilities located in the targeted area.

4. Please indicate if there will be any required fees to help mitigate potential impacts to park and recreation facilities.

   The Upland municipal code mandates either the dedication of park land or imposes a park development fee on all new development in the City.

5. Will park dedication be required as part of this project to mitigate potential impacts?

   Developers have identified open space that they are considering for designation as a park. Because of the location, it would only be used for passive use. In the event the developer chooses not to develop this park site, they would be required to pay the park development fee, or do an enhancement at one of the parks impacted by the development.

6. Do you have any required or recommended mitigation measures for significant impacts?

   Because this proposed development is multi-family, we would anticipate that the residents of this community will have a greater need for active park space and enhancements to our current facilities. Picnic areas and sports fields are in high demand in this area. Enhancements to existing facilities at Memorial Park could be used to mitigate the impact on current resources. The increased demand for senior services would need to be addressed through increased programming options as well as expanding the building to add usable space.

7. Is there any other relevant information regarding potential impacts of the project?

   None other than those previously mentioned.

8. Do you anticipate that project implementation would result in the need for physical additions to your agency (i.e., construction of new park and recreational facilities)?

   It is anticipated that when completed, an additional burden will be placed on existing facilities. However, we would not anticipate that given the service area that any new park construction would be needed. Improvements to existing facilities would adequately meet the needs of residents.

Upland Unified School District
390 N. Euclid Avenue
Upland, CA 91786-4763
www.upland.k12.ca.us
(909) 985-1864

Gary Rutherford, Ed.D., Superintendent

Assistant Superintendents:
Deo Persaud, Business Services
Sherri L. Black, Human Resources
Linda Kaminski, Ed.D., Educational Services

RECEIVED
MAY 17 2010
RBF Consulting

May 13, 2010

Ms. Starla Baker, AICP
RBF Consulting
14725 Alton Parkway
Irvine, CA 92618-2027

Dear Ms. Baker;

This letter is in response to your questions regarding the Historic Downtown Upland Environmental Impact Report.

1. Please indicate the name and location of schools which are available to serve the project area.

Upland High School	565 West 11th Street
Hillside High School	1558 West 9th Street
Upland Jr. High	444 East 11th Street
Baldy View Elementary	979 West 11th Street
Citrus Elementary	925 West 11th Street
Upland Elementary	601 North 5th Avenue

2. What is the current enrollment and capacity of each school in the vicinity of the project, and what is the distance of the school from the project area?

School	Current Enrollment
Upland High School	3,410
Hillside High School	225
Upland Jr. High	916
Baldy View Elementary	699
Citrus Elementary	702
Upland Elementary	554

School Level and SDC	School Capacity	School District Enrollment	Excess (Shortage) Capacity
Elementary School K-3	3,060	3,328	(268)
Elementary School 4-6	3,125	2,684	441
Jr High School 7-8	2,015	1,996	19
High School 9-12	3,726	3,894	(168)
Special Education (SDC)	144	252	(108)

BOARD OF TRUSTEES: Linda Angona • Wes Fifield • Steve Frazee • P. Joseph Lenz • Michael J. Varela

3. What are the current student generation rates used to project enrollment based on residential and non-residential development?

0.64	Single Family Unites
0.25	Multi-Family Units

4. Does the District charge developer fees for residential and non-residential development. If yes, what are these fees? Are there any other required or recommended mitigation measures for the project?

Residential	$2.97 sq. ft. of living space
Commercial/Industrial	$ .47 sq. ft

5. Does the District have any current plans for new school facilities that would serve the project?

Currently the District has no plans for any new school facilities that would serve the project area.

6. Is there any other relevant information regarding significant project impacts?

Please see the enclosed demographic study and developer fee justification study for further information.

Sincerely,

Jammee Digon
Administrative Assistant-Business Services

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

May 24, 2010

Starla Barker
Project Manager
RBF Consulting
14725 Alton Parkway
Irvine, CA 92618

Subject: Historic Downtown Upland Specific Plan Environmental Impact Report

Dear Ms. Barker,

The Inland Empire Utilities Agency (IEUA) has reviewed the above referenced subject and has the following comments/recommendations:

- The project is located within 0.5 mile of an existing IEUA Recycled Water Line. The development should construct facilities to use recycled water for all approved uses including irrigation and industrial in accordance with California Law which requires recycled water be used when it is available.

- It appears that the development will provide wastewater flow to existing IEUA sewer lines, consistent with IEUA's Sewer Master Plan. Please continue to notify IEUA of any additional connections to our Regional Sewer System.

Below are answers to your specific questions:

- **Please indicate the location of facilities which serve the project area vicinity and present available capacity for the affected trunk line and treatment plant.**

  Sewer service to this area will be provided by the City of Upland sewer facilities. Sewer flows from the area will be conveyed by City sewer facilities to the following IEUA regional sewer facilities:

Facility	Capacity of Facility	Available Capacity of Facility
Upland Interceptor	**29 MGD**	**10-12 MGD**
Relief Sewer		
Regional Plant #1	**44 MGD**	**10-12 MGD**

- **What is the estimated sewage flow for the project based upon information provided?**
  Please refer to Exhibit J of the Chino Basin Regional Sewer Service Contract for how to estimate sewage flow for various types of land use.

- **Would implementation of the project present a significant increase in service demand based upon project development?**

  Yes, based on the information provided there would be a significant increase in wastewater flows.

- **Does the wastewater treatment provider which serves or may serve the project area have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

  IEUA, as the regional wastewater treatment provider, does have adequate capacity in its conveyance facilities (Upland Interceptor Relief Sewer) as well as at the wastewater treatment facility (RP-1).

- **Is there any other relevant information regarding significant project impacts?**

  Exhibit J of the Chino Basin Regional Sewer Service Contract requires IEUA and its member agencies to assume an average of 270 gpd/EDU. However, IEUA has seen that newer developments may actually have lower average flows.

- **Do you have any assessment fees for other required or recommended mitigation measures for the project?**

  Yes, IEUA currently charges $4,766/EDU connection and a monthly fee of $10.75. (A monthly fee increase of $0.39 was recently approved by the Technical & Policy Committees of the IEUA service area.)

If you have any questions, please feel free to contact me at (909) 993-1635 or by email at rshaw@ieua.org.

Regards,

Ryan Shaw
Planning & Water Resources Department
Inland Empire Utilities Agency

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

November 1, 2007

Attn: Facilities Inventory Map Information Clients

SUBJECT: **Requests for Southern California Edison Facilities Inventory Map Information**

As a reminder, the process for obtaining copies of SCE Facilities Inventory Maps (FIMs) is included. **Please read carefully and save for future reference**.

Requests may be submitted by U.S. mail or FAX **(no phone or E-mail requests please):**

Southern California Edison
Attn: Map Requests Bldg D
P.O. Box 11982
Santa Ana, CA 92711-1982
FAX (714) 796-9999

To keep charges to a minimum, it is recommended that requests be *precise* about the location to be researched as well as whether *overhead and/or underground FIMs are desired*. Map requests should define the **exact** project route or site using **Thomas Brothers Map page** or vicinity maps. ***NO large tract maps please!*** (Copy of Thomas Bros Map page "clearly marked" should accompany request).

Hard copies of FIMs will be provided at a cost of $13.55 per map. Upon completion of the facilities research, copies of the existing facilities maps will be sent to the requester via U.S. Mail, United Parcel Service or FedEx (if requester provides an account number for courier service), or can be picked up at SCE's Santa Ana office with prior arrangements. An invoice for the cost of providing all maps and services will be sent to the requester along with the maps. Please be sure to use the address shown on the invoice to insure proper credit to your account and avoid delaying future map requests. *Delinquent payments will result in future map requests being delayed or "denied".*

Please allow ten (10) business days from the receipt of the request by Facilities Mapping for standard processing. For non-standard or rush requests, handling fees of $65.50 per hour, in ¼ hour increments, ½ hour minimum, will be added to the cost.

If the requester chooses not to accept the FIM copies after SCE has completed the requested work, the client will be charged the hourly rate for time spent.

If you have any questions, please contact the undersigned at (714) 796-9932

Sincerely,

Kim Gurule
Program Analyst
Facilities Mapping, Power Delivery Department

P.O Box 11982
Santa Ana, CA 92711-1982

ELECTRIC SERVICE
QUESTIONNAIRE

Please respond to the following questions on your agency/company letterhead and provide maps to illustrate facility locations.

1. What is the present service area and/or locations of your facilities? Are any of these facilities within the proposed project boundaries as shown on the attached Project Location map?
   SCE currently has existing facilities throughout the city of Upland. Please use the attached form to purchase copies of our facilities inventory maps.

2. What is the present capacity and/or nature of your facilities? (Please provide any available information necessary to evaluate existing conditions in the project area and potential impacts).
   SCE currently serves the city of Upland off of our 12 KV electrical system, both overhead and underground.

3. What is the projected electrical demand for the project based upon the information provided?
   SCE requires that every customer provide a load schedule as part of the project submittal. This information is used to calculate the electrical demand.

4. Can your facilities in the service area supply the required additional electricity currently or on project completion?
   Based on the limited load information provided by RBF I would estimate that SCE's existing electrical system is sufficient.
5. Do you anticipate any project related impacts to your facilities? Specifically, will the proposed project impact service or require new or modified facilities? If so, please list/summarize additions or modifications.
   Any required modification to SCE's existing facilities would be determined during the design phase of the project.

6. Do you anticipate any short-term construction or related impacts, such as a possible disruption of service?
   TBD

7. Do you require or recommend any mitigation measures for any project impacts noted in Items 3, 4, or 5?
   TBD

8. Is there any other relevant information regarding potential significant impacts of the project?
   None at this time.