# FINAL

Environmental Impact Report Technical Appendices

June 2003







North Downtown Lancaster Neighborhood Revitalization / Transit Village Plan Sch#2002101100

1.

Prepared by RBF Consulting

Administrative Draft EIR Completed:February 3, 2003Draft Check Copy EIR Completed:March 13, 2003Public Review Draft EIR Completed:April 14, 2003Final EIR Completed:June 25, 2003

### FINAL

## **ENVIRONMENTAL IMPACT REPORT APPENDICES**

## NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN

SCH NO. 2002101100

Lead Agency:

#### **CITY OF LANCASTER**

Community Development Department 44933 North Fern Avenue Lancaster, California 93534 *Contact: Mr. Brian Ludicke* 661.723.6100

Prepared by:

#### **RBF CONSULTING**

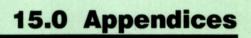
14725 Alton Parkway Irvine, California 92618-2069 *Contact: Mr. Glenn Lajoie, AICP* 949.472.3505

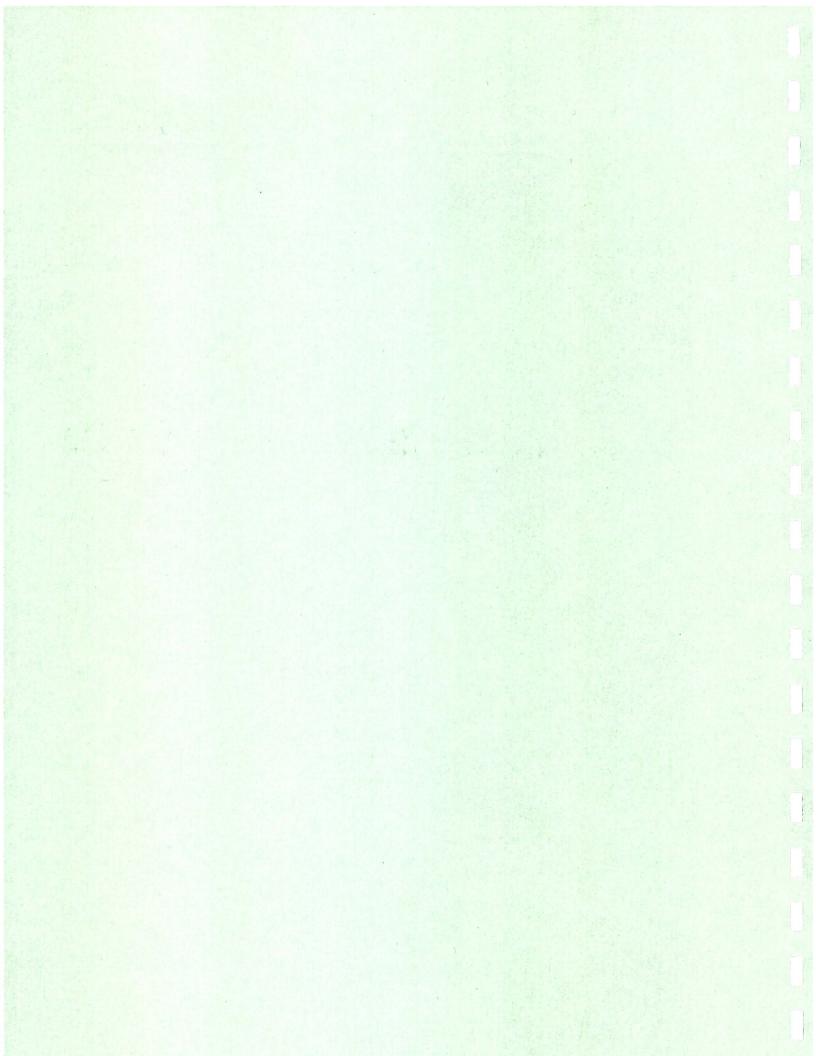
June, 2003

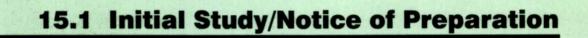
JN 10-102041

#### Section 15.0: Appendices

- 15.1 Initial Study/Notice of Preparation
- 15.2 Notice of Preparation Responses
- 15.3 Traffic Impact Study
- 15.4 Air Quality Data
- 15.5 Noise Data
- 15.6 Historical Resources Survey Report
- 15.7 Hazardous Materials Study
- 15.8 Correspondence









#### NOTICE OF PREPARATION

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Interested A	gencies	and	Organizations
(Agency)	-		-

(Address)

#### Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:	Consulting Firm:
Agency Name: <u>City of Lancaster</u>	Firm Name: <u>RBF Consulting</u>
Street Address: _44933 North Fern Avenue	Street Address: 14725 Alton Parkway
City/State/Zip: Lancaster, California 93534	City/State/Zip: Irvine, California 92618
Contact: Brian Ludicke	Contact: Glenn Lajoie, AICP

<u>CITY OF LANCASTER</u> will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ( $\boxtimes$  is  $\square$  is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but *not later than 30 days* after receipt of this notice.

Please send your response to <u>Brian Ludicke</u> at the address shown above. We will need the name for a contact person in your agency.

Project Title: North Downtown Neighborhood Revitalization Transit Village Plan				
<b>Project Location:</b>	City of Lancaster	Los Angeles		
	City (nearest)	County		
<b>D</b> raiaat Descriptio	ne (hais)			

#### **Project Description:** (brief)

The proposed project involves the development of in-fill affordable housing, redevelopment of commercial retail and modifications to existing street patterns which includes construction of a new street and closure of certain streets. In addition, entities are proposing development of a christian school, construction of a children's counseling facility, expansion of a church/school and related ancillary facilities and construction of a mental health facility. A 10 to 12-acre park is proposed as the core focus of the plan.

Date: October 16, 2002

S. Ludicke Signature:

Brian Ludicke

Title: Community Development Director

Telephone: 661.723.6119

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

Revised October 1989

**INITIAL STUDY/ENVIRONMENTAL CHECKLIST** 

## NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN

LEAD AGENCY:

**City of Lancaster** 

44933 North Fern Avenue Lancaster, California 93534-2461 *Contact:* Mr. Brian Ludicke 661.723.6119

#### **PREPARED BY:**

#### **RBF** Consulting

14725 Alton Parkway Irvine, California 92718 *Contact: Glenn Lajoie, AICP* 949.472.3505

October 16, 2002

JN 10-102041

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## **1.0 INTRODUCTION**

Following preliminary review of the proposed project, the City of Lancaster has determined that the North Downtown Neighborhood Revitalization/Transit Village 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 project, as proposed.

#### 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 potential significant impacts upon the environment that would result from construction and implementation of the project. In accordance with Section 15063 of the State CEQA Guidelines, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of Lancaster, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration or Environmental Impact Report (EIR) would be required for the proposed North Downtown Neighborhood Revitalization/Transit Village Plan project. The purpose of this Initial Study is to inform the City of Lancaster 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 Lancaster 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 and Notice of Preparation (NOP) serves as part of the scoping process to determine the appropriate environmental documentation for the project.

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 Lancaster. The City will review and consider all comments as a part of the projects environmental analysis, using the comments to further determine the necessary environmental document, as required in Section 15082 of the CEQA Guidelines. 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 Lancaster.

#### 1.2 CONSULTATION

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 Lancaster would consider any recommendations of



those agencies in the formulation of the preliminary findings. Following execution of this Initial Study, the City of Lancaster would 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 Lancaster Community Development Department located at 44933 Fern Avenue, Lancaster, California, 93534.

- <u>City of Lancaster General Plan/Master Environmental Assessment</u>, 1997.
- □ <u>City of Lancaster General Plan/Environmental Impact Report</u>, 1997.
- <u>City of Lancaster Central Business District Redevelopment Project</u> <u>Environmental Impact Report</u>, 1981.





### 2.0 PROJECT DESCRIPTION

#### 2.1 PROJECT LOCATION & SETTING

#### PROJECT LOCATION

The proposed North Downtown Neighborhood Revitalization/Transit Village Plan (NRTVP) project area is located in the City of Lancaster, California. The City of Lancaster is located in northern Los Angeles County in the Antelope Valley, which is approximately 70 miles north of downtown Los Angeles, (refer to Exhibit 2-1, *Regional Vicinity*). Lancaster is part of the Mojave Desert basin, which is relatively flat, yet surrounded by the San Gabriel Mountains, Sierra Pelona and Tehachapi Mountains. The NRTVP comprises 110± acres generally located south of Avenue I, east of 10<sup>th</sup> Street West between Avenue I and Jackman Street, east of Fern Avenue between Jackman Street and Kettering Street, north of Kettering Street West and west of North Sierra Highway in the City of Lancaster, California (refer to Exhibit 2-2, *Project Vicinity*). The NRTVP comprises the northwestern portion of Lancaster's overall Transit Village planning area. The Transit area contains approximately 330 acres centered around the Metrolink Rail Station located on Sierra Highway south of Lancaster Boulevard.

#### **EXISTING CONDITIONS**

The NRTVP currently contains a mix of residential, commercial, educational, religious and public uses served by a grid system of local paved streets. The plan area contains several prominent uses including Sacred Heart Catholic Church and School, the Antelope Valley Senior Center, the Salvation Army, Homeless Solutions Assessment Center and Grace Resources Center. Other educational facilities include the Adventist School and childcare facilities. Uses immediately adjacent to the project area include the Lancaster City Hall, the Lancaster Los Angeles County Library and the Los Angeles County Sheriff's Department.

Residential uses within the project area consist of a mix of single-family residences, duplexes, triplexes, small apartments and several large-scale apartment complexes. Three of the large-scale complexes are for senior housing. Age and condition of the housing varies greatly with newer apartment complexes generally being in good condition. Many of the single-family residences and smaller-scale multiple-family housing units are in need of minor (cosmetic) to major rehabilitation. The housing condition is generally better in the western portion of the plan area when compared to the eastern area.

Commercial uses are prominent along Avenue I (except between Fern Avenue and Elm Avenue) and along the west side of Sierra Highway. West of Fern Avenue, uses are generally Retail in character, including fast-food restaurants and a discount grocery store. East of Elm Avenue and along Sierra Highway the commercial uses consist primarily of vehicle-related businesses including auto parts stores, tire stores and automobile sales and repair. The condition of this commercial area declines from west to east.



The only significant area of undeveloped land is located at the northeast corner of 10<sup>th</sup> Street West and Jackman Street.

#### 2.2 BACKGROUND

The planning effort for the North Downtown area sets a long-term course for the improvement of the area bounded by Avenue I, Kettering Avenue, the railroad tracks and Fern Avenue.

The vision plan for the area meets the needs of the community as well as several of its existing organizations, including Sacred Heart Church and School, the Salvation Army, St. Vincent De Paul, Grace Resources, Lancaster Old Town Site and the Los Angeles County Sheriff, Lancaster Station. Three other organizations interested in moving into the area are Desert Christian School, the Mental Health Association and the Children's Center of the Antelope Valley.

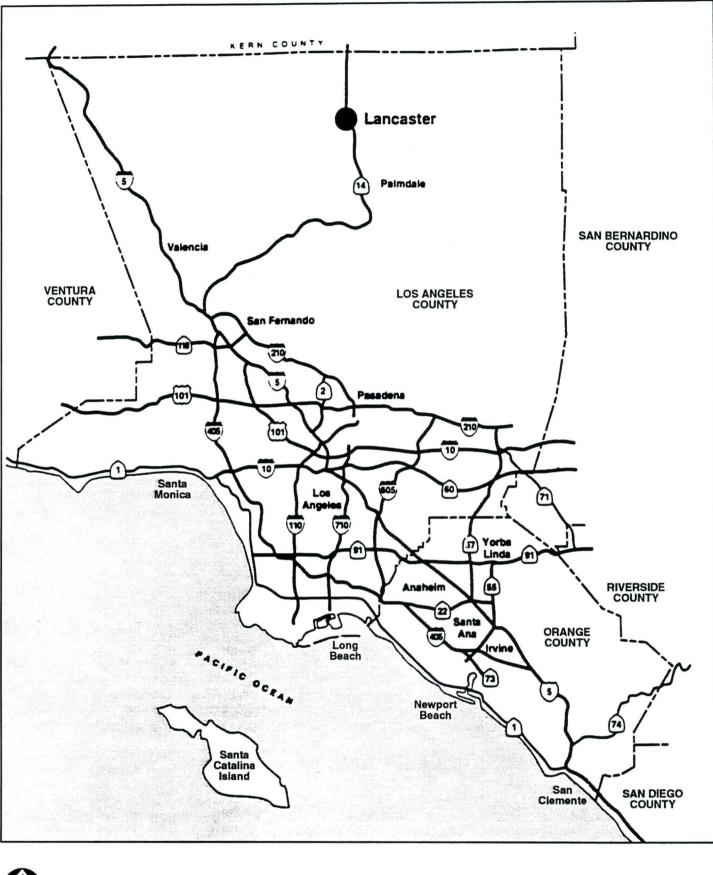
Over the past year, a team of planners, stakeholders and consultants created a vision plan after extensive study of the area including its governmental, church and service uses; traffic patterns and vacant lots. It was recommended that the City Council build a neighborhood that would support youth and educational uses, retain the historic character of the area, accommodate social service providers, beautify the neighborhood and improve the area as a public services destination.

#### 2.3 **PROJECT CHARACTERISTICS**

The NRTVP proposes a combination of new uses, expansion of certain existing uses, and rehabilitation of some existing residential blocks. The core focus of the plan is a five-block area bounded by Jackman Street, Beech Avenue, Kettering Street and Fern Avenue (refer to Exhibit 2-3, *Site Plan*). The primary feature of the neighborhood is a new 10 to 12-acre park proposed for the area generally bounded by Jackman Street, Date Avenue, Kettering Street and Fig Avenue.

The proposed park is intended as a joint use facility during school hours for two primary uses in the project area. The Sacred Heart Catholic Church operates a parish consisting of 4,100 families at the northwest corner of North Cedar Avenue and West Kettering. The facility would expand from the current 5-acre area to 15 acres in order to respond to future needs. The expansion would include a new 1500-2000 seat sanctuary supported by 300 spaces of parking. Other expansion needs include doubling the amount of classrooms to support over 700 students and other activity center uses. The existing Church Sanctuary would be retained as a type of Church Community Center. In order to accommodate the expansion, land area would be utilized west of Beech Avenue to the proposed park facility. This would also result in the closure of North Cedar Avenue and North Date Avenue between West Jackman and West Kettering.

The second entity proposed for joint usage of the proposed park is the Desert Christian School, proposed to the west of the park and extending to Fern Avenue. Desert Christian School is seeking a Junior/Senior High School on 12 to 15 acres of land. Proposed educational facilities would accommodate 1500 students. The facility would include classrooms, a gymnasium, library and cafetorium and would include two story structures.



INITIAL STUDY/ENVIRONMENTAL CHECKLIST NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/TRANSIT VILLAGE PLAN PLANNING DESIGN D CONSTRUCTION



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Exhibit 2-1

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LANCASTER MUINCIPAL STADIUM (THE HANGAR) TADIUM (THE HANGAR) MARKETPLACE MARKETPLACE MARKETPLACE			
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Ave ave a to the second	AVE	HIMMEN ST. THESHING ST.	
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INITIAL STUDY/ENVIRONMENTAL CHECKLIST NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/TRANSIT VILLAGE PLAN **Project Vicinity** 

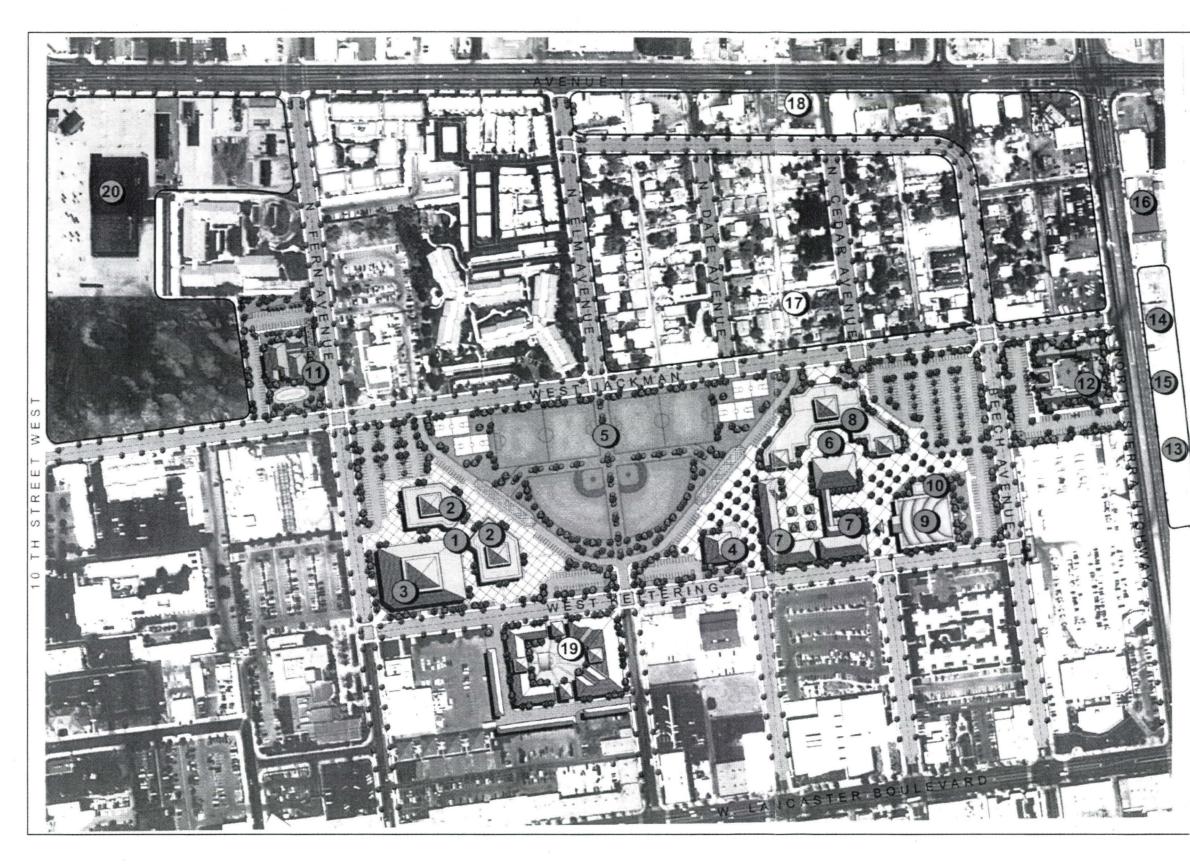
PLANNING DESIGN CONSTRUCTION

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Exhibit 2-:

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Not to Scale

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JN 10-102041

LANNING B DESIGN B CONSTRUCTION

#### **Desert Christian** School Campus



1

Potential Expansion Opportunities



3 The Affordable School



4) Child Care Center



5 Neighborhood Park



6 Sacred Heart Catholic Church Campus

Rectory, Parish Center, Activity Hall (Existing Buildings)



8 Education Center



9 New Church

Sacristies / Reconciliation Chapels

(11) The Children's Center of the Antelope Valley



(12) Mental Health Association



13 St. Vincent De Paul



(14) Salvation Army Church

Salvation Army Community Building



- (16) Grace Resources Center
- (17) Preserve Neighborhood with New Infill Housing as Necessary
- (18) Enhanced Commercial Strip and New Housing Opportunity



- (19) Rehabilitated and New Housing
- (20) Potential New Commercial Center: Rehabilitation and New Development

INITIAL STUDY/ENVIRONMENTAL CHECKLIST NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/TRANSIT VILLAGE PLAN.

Site Plan

Exhibit 2-3



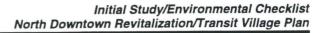
A second major focus of the NRTVP is the revitalization of the four block residential and commercial area bounded by Avenue I, Sierra Highway, Jackman Street and Elm Avenue. The eastern-most block, adjacent to Sierra Highway, is proposed for a combination of retail and service commercial uses. Mixed residential and commercial uses are also a possibility. The plan emphasis in the three blocks west of Beech Avenue is for the retention and rehabilitation of the existing housing stock. This effort would include the under grounding of utilities, installation of decorative lighting fixtures, new landscaping and improvement of the visual quality of the alleyways.

The street pattern would be modified by constructing a new street between Beech Avenue and Elm Avenue approximately 175 feet south of and parallel to Avenue I. Beech Avenue, Cedar Avenue and Date Avenue would be closed north of this street. The existing commercial strip along Avenue I is proposed to be redeveloped with housing units to improve the aesthetic appearance of the area and create a land use pattern compatible with the revitalized housing area to the south.

Sites for several social service organizations are also proposed in the NRTVP. The existing Grace Resources Center, located on the east side of Sierra Highway at Jackman Street, would be one of a group of related organizations including the Mental Health Association, St. Vincent de Paul, and the Salvation Army.

The Children's Center of the Antelope Valley is a non-profit organization founded in 1990 to help child abuse victims, prevent child abuse and provide related educational services. The Center's current facility is inadequate in size and design. The Center would develop a 15,445 square foot facility at the northwest corner of Jackman Street and Kern Avenue. The facility would accommodate current needs and offers expansion opportunities for growth.

The Mental Health Association would develop a 20,000 square foot facility on approximately 2.5 acres at the southwest corner of Sierra Highway and Jackman Street. This location, across from Grace Resource Center, would benefit both organizations and their clients. The plan envisions the relocation of the Salvation Army from its current site at Beech Avenue and Kettering Street to the vicinity of Beech Avenue and Jackman Street. St. Vincent de Paul, currently located at the northwest corner of Beech Avenue and Kettering Street, does not require relocation in order to operate as part of this social services group.





### 3.0 INITIAL STUDY CHECKLIST

#### 3.1 BACKGROUND

#### 1. Project Title: North Downtown Neighborhood Revitalization/Transit Village Plan

#### 2. Lead Agency Name and Address:

City of Lancaster 44933 North Fern Avenue Lancaster, California 93534-2461

#### 3. Contact Person and Phone Number:

Mr. Brian Ludicke, Director of Community Development 661.723.6119

#### 4. Project Location:

The project area is generally located south of Avenue I, east of 10<sup>th</sup> Street West between Avenue I and Jackman Street, east of Fern Avenue between Jackman Street and Kettering Street, north of Kettering Street between Fern Avenue and Beech Avenue, north of Jackman Street between 10<sup>th</sup> Street West and west of North Sierra Highway in the City of Lancaster, California.

#### 5. Project Sponsor's Name and Address:

City of Lancaster 44933 North Fern Avenue Lancaster, California 93534-2461

6. General Plan Designation: Moderate Residential, Light Industrial and Commercial

- 7. **Zoning:** High Density Residential, Commercial, Central Business District, Commercial Planned Development and Light Industrial.
- 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 North Downtown Neighborhood Revitalization/Transit Village Plan comprises the northwestern portion of Lancaster's overall Transit Village planning area. The area is within the Lancaster Central Business District Redevelopment project area. Surrounding land uses include residential, commercial, industrial, central business district and public 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 Project 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
1	Air Quality	1	Noise
	Biological Resources	1	Population and Housing
1	Cultural Resources	1	Public Services
	Geology and Soils	1	Recreation
1	Hazards & Hazardous Materials	1	Transportation/Traffic
1	Hydrology & Water Quality	1	Utilities & Service Systems
1	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.

S. Zudick

Signature

Brian Ludicke

Printed Name

City of Lancaster

Agency

October 16, 2002

Date



#### 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
   Transportation/Traffic
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines and used by the City of Lancaster in its For the preliminary environmental assessment environmental review process. 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.	AE	STHETICS. Would the project:				
	a.	Have a substantial adverse effect on a scenic vista?			1	
	b.	including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			1	
	с.	character or quality of the site and its surroundings?			1	
	d.	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			1	
2.	env (19	<b>RICULTURE RESOURCES.</b> In determining white ironmental effects, lead agencies may refer to the California 97) prepared by the California Department of Conservation as I farmland. Would the project:	a Agricultural L	and Evaluation	and Site Asses	sment Model
	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?				J
	b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				1
	С.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				1
3.	AIF	R QUALITY. Where available, the significance criteria e ution control district may be relied upon to make the following	established by	the applicable a Would the proje	ir quality manag	ement or air
	a.		V			
	b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	1			
	C.		5			
	-	Expose sensitive receptors to substantial	1			
	d.	pollutant concentrations?				



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			Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
4.	BIC	DLOGICAL 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?				5
	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?				1
	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?				1
	e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				1
	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?				1
5.	CU	LTURAL RESOURCES. Would the project:				
		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?			1	
	C.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			1	
	d.	Disturb any human remains, including those interred outside of formal cemeteries?				1



			Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
6.	GE	OLOGY 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			1	
		based on other substantial evidence of a				
		known fault? Refer to Division of Mines				
		and Geology Special Publication 42.				
		2) Strong seismic ground shaking?			1	
		3) Seismic-related ground failure, including			1	
		liquefaction?				
		4) Landslides?			1	
	b.	Result in substantial soil erosion or the loss of			1	
		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			1	
		(1994), creating substantial risks to life or				
	0	property? Have soils incapable of adequately supporting				
	e.	the use of septic tanks or alternative waste				
		water disposal systems where sewers are not			1	
		available for the disposal of waste water?				
7.	ΗΔ	ZARDS AND HAZARDOUS MATERIALS: Would i	the project:			
1.	a.	Create a significant hazard to the public or the	ne project.			
	a.	environment through the routine transport, use,				
		or disposal of hazardous materials?			v	
	b.	Create a significant hazard to the public or the				
	υ.	environment through reasonably foreseeable				
		upset and accident conditions involving the			1	
		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			1	
		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	1			
		a result, would it create a significant hazard to				
		the public or the environment?				



			Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
	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?				1
	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?				1
	g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	1			
	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?			1	
8.	HY	DROLOGY AND WATER QUALITY. Would the pro	ject:			
	a.	Violate any water quality standards or waste			1	
	b. c.	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)? Substantially alter the existing drainage pattern			<i>·</i>	
		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?			1	
	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?			1	
	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?			1	
	f.	Otherwise substantially degrade water quality?			1	
	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?			1	



0

			Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
	h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			1	
	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?				1
	j.	Inundation by seiche, tsunami, or mudflow?				1
9.	LA	ND USE AND PLANNING. Would the project:				
	a.	Physically divide an established community?				1
	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?			1	
	c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?		u.		1
10.		NERAL 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?				1
	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?				1
11.	NO	ISE. Would the project result in:				0
	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?	1			
	C.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	~			
	d.	ambient noise levels in the project vicinity above levels existing without the project?	1			
	е.	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?				1



		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 expose people residing or working in the project area to excessive noise levels?				1
12. PO	PULATION 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?	1			
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	1			
	BLIC SERVICES.				
a.	<ul> <li>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:</li> <li>1) Fire protection?</li> <li>2) Police protection?</li> <li>3) Schools?</li> </ul>				
	4) Parks?	1			
	5) Other public facilities?	1			
14. RE	CREATION.				
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?	1			
15. TR	ANSPORTATION/TRAFFIC. Would the project:				
	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)?	5			



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	1			
C.	including either an increase in traffic levels or a change in location that results in substantial safety risks?				1
d.	feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			~	
e.	Result in inadequate emergency access?	1			
f.	Result in inadequate parking capacity?			1	
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			1	
16. UT	ILITIES AND SERVICE SYSTEMS. Would the proje	ect:			
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	1			
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?			1	
d.		\$			
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?	1			
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	1			



		Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than SignIficant Impact	No Impact
17. MA	ANDATORY 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?	1			



# 4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study. 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 City of Lancaster General Plan MEA/EIR does not identify the project area within or as a part of a scenic vista. Scenic resources in the City of Lancaster consists of desert environment as well as long-range views of the San Gabriel, Sierra Pelona and Tehachapi Mountains.

The project area is urbanized with a mix of land uses. Areas surrounding the project area are not anticipated to be affected by any type of view obstruction. The proposed project would alter the visual character of the area by enhancing degraded conditions. The project proposes refurbishment of existing housing stock, in addition to providing residential opportunities. Deteriorated commercial areas along Avenue I and North Sierra Highway would be redeveloped to provide opportunities for new housing and commercial uses. The project includes renovation and expansion of existing education/religious facilities, which would be located adjacent to a shared park facility. The shared park facility would be centrally located within the project area providing public open space and recreational opportunities for the community after school hours. The project would include undergrounding of utilities and other public improvements. which would further enhance the visual quality of the area. Design standards for existing and new development and landscaping/streetscape improvements would add to the visual character of the area. Thus, visual impacts resulting from implementation of the proposed project would be less than significant.

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 Lancaster General Plan MEA/EIR, no officially designated scenic routes or highways occur within the project area. Mature trees that exist in the area, are not designated as scenic resources. No rock outcroppings occur in the project area. Also, there are no historic buildings located within a state scenic highway. As previously stated, the project area is currently urbanized with a mix of uses. Impacts to scenic resources would be less than significant.

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

Less Than Significant Impact. It is not anticipated that the visual character or quality of the project area or its surroundings would be degraded. As previously stated, degraded conditions do occur in the area and the project would enhance the visual character. Thus, impacts are concluded as less than significant.



d)

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

*Less Than Significant Impact.* The project area is currently urbanized and contains various forms of on-site lighting. Additional lighting would be included for activity areas involving nighttime uses, parking, security lighting around structures and interiors of buildings. Spillover impacts from on-site lighting to surrounding uses are not anticipated. Therefore, impacts are less than significant.

- **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 use.

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 zoned for high density residential, commercial, central business district, commercial planned development and light industrial uses.

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 that are occurring.

- **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 Mojave Desert Air Basin (MDAB), monitored by the Antelope Valley Air Pollution Control District (AVAPCD). The U.S. EPA has classified the MDAB as a severe-17 non-attainment area for Ozone ( $O_3$ ) and an unclassified Suspended Particulate Matter ( $PM_{10}$ ) area. Further review is necessary to confirm the project's status in terms of compliance/conflict with current AVAPCD guidelines.



b)

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

**Potentially Significant Impact.** Construction and buildout of the project area 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 site 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 Antelope Valley Air Pollution Control District 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, childcare facilities; several youth based service centers and a senior citizen 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. 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. In addition, the proposed land uses are not anticipated to create objectionable odors affecting a substantial number of people.

### **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 infill development, rehabilitation and expansion of existing structures. 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 builtout. No riparian habitat or natural communities exist on-site. The Lancaster General Plan MEA/EIR identifies the project area as *Disturbed Lands*, which are urbanized.

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 on-site. Therefore, implementation of the proposed project would not result in any impacts in that 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 that regard.

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

**No Impact.** The project site is comprised of non-native vegetation and does not include Joshua tree woodland habitat. 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 area is predominately urbanized and built out. The project proposes infill development, preservation and rehabilitation of existing structures, expansion of religious/education facilities; enhancement of various services based amenities and the introduction of open space. The General Plan MEA/EIR has



identified potential historical resources/structures in the local area. Further analysis will be required to determine if historic resources occur 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 and built out with land area having been previously disturbed. According to the Lancaster Central Business District Redevelopment Project EIR, no archaeological resources are known to exist in the project area. Should evidence of archeological resources occur during grading and construction, operations would be required to cease and the City is required to be contacted.

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 and built out with land area having been previously disturbed. No paleontological resources are known to exist on site. Should evidence of paleontological resources occur during grading and construction, operations would be required to cease and the City is required to be contacted.

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

*No Impact.* The project area is predominately urbanized and built out with land area having been previously disturbed. There are no known human remains that occur onsite.

### **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 City's General Plan MEA/EIR, Lancaster is located in a seismically active area of the Mojave Desert. The San Andreas Fault is located nine miles south of the City and the Garlock Fault is located twenty miles to the northwest of the City. No active faults are known to traverse the area and the project is not located within, or immediately adjacent to an Alquist-Priolo Earthquake Fault Zone. Therefore, rupture of a known earthquake fault would not occur within the project area. Furthermore, adherence to standard engineering practices and design criteria relative to seismic and geologic hazards in accordance with the Uniform Building Code (UBC) is required.



# 2) Strong seismic ground shaking?

Less Than Significant Impact. According to the City's General Plan MEA/EIR, the project area is located in Zone 1 for seismic shaking. Zone 1 represents an area that would be exposed to the most intense seismic ground shaking. No known faults exist within the project boundary. The San Andreas Fault is located nine miles south of the City and the Garlock Fault is located twenty miles to the northwest of the City. The project area would experience ground shaking from earthquakes generated along active faults located off-site. 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.

Adherence to standard engineering practices and design criteria relative to seismic and geologic hazards in accordance with the Uniform Building Code (UBC) would reduce the significance of potential impacts to less than significant.

# 3) Seismic-related ground failure, including liquefaction?

**Less Than Significant Impact.** The project area is not within the zones of the City identified in the City's General Plan MEA/EIR as being potentially subject to liquefaction. Therefore, the project is not anticipated to result in or expose people to potential impacts related to seismic ground failure, or liquefaction.

# 4) Landslides?

*Less Than Significant Impact.* The project area is relatively flat. The potential for landslides on-site is less than significant.

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

Less Than Significant Impact. Clearing and grading for construction may expose soils to short-term wind and water erosion. Implementation of erosion control measures as required by the City and adherences to all requirements set forth in the National Pollutant Discharge Elimination System (NPDES) permit for construction activities would reduce these impacts to less than significant.

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.* The project area has not been identified as a geologic unit that is unstable, and based upon available references, would not become unstable as a result of project implementation. Refer to responses throughout Section 4.6.

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.* The City's General Plan MEA/EIR identifies the project area as being located in an area consisting of desert soils of the Hesperia-Rosamond-Cajon and Pond-Tray-Oband Association. These soils are stable, well drained and most conducive for development. Thus, no significant impacts are anticipated in this regard.



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/modifications to on-site sewer systems. It would not be necessary to install septic tanks or other alternative types of wastewater disposal systems. No 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.

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?

**Less Than 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.

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 area. 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.

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.** A Phase 1 Environmental Site Assessment will be necessary to determine if any potential contamination exists within the project area. Further review and analysis of this potential impact is required.

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?



**No Impact.** The project area is not located within two miles of an airport. The nearest airport is General William J. Fox Airfield, approximately six miles northwest of the project area. Private planes primarily use Fox Field and there is no commercial passenger capability. A safety hazard for people residing or working in the project area is not anticipated given the distance from Fox Field.

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?

No Impact. Refer to Response 4.7(e).

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

**Potentially Significant Impact.** The proposed plan involves closing access along North Date Avenue, North Cedar Avenue and Beech Avenue. A new street south of and parallel to Avenue I would be constructed linking Beech Avenue, North Date Avenue and North Cedar Avenue. North Elm Avenue would have direct access to Avenue I. North Elm Avenue, North Date Avenue and North Cedar Avenue would be closed south of West Jackman and North of West Kettering, for the proposed park facility. The City's General Plan MEA/EIR does not designate the streets proposed for closure as evacuation routes. However, Avenue I is a designated evacuation route. Direct access to Avenue I from Beech Avenue, North Date Avenue and North Cedar Avenue would be diverted to North Elm Avenue or to West Jackman. Any street closures proposed by the project would be reviewed by the Los Angeles County Fire Department (LACFD), and subject to all emergency access standards and requirements. Further review and analysis of this potential impact is required.

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?

**Less Than Significant Impact.** The project area and surrounding areas are predominately built out. Future development as a result of project implementation would introduce additional ornamental landscaping, which is not anticipated to create hazardous fire conditions.

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

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

**Less Than Significant Impact.** The project proposes infill development, preservation and rehabilitation of existing structures, expansion of religious/education facilities; enhancement of various services based amenities and the introduction of open space. The proposed project is consistent with current runoff conditions. Modifications of existing infrastructure proposed by the project would further improve existing conditions. Urban runoff is not expected to increase as a result of implementation of the proposed project.

In addition, compliance of statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction

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Activity, which would prevent storm water pollution from impacting waters of the U.S. in the vicinity of the project area, will be required.

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)?

Less Than Significant Impact. The project area is urbanized and adjacent areas are predominately built-out. Implementation of the project would not cause a significant addition of impervious surfaces. The project is consistent with current conditions in the area. Therefore, any impacts would be less than significant.

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?

*Less Than Significant Impact.* As previously stated, project area is currently urbanized and adjacent areas are predominately built-out. Implementation of the project would not cause a significant addition of impervious surfaces. The project includes improvements of the current infrastructure system, which would further reduce any impacts to less than significant.

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?

Less Than 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?

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

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. Short-term surface water quality impacts may occur from water erosion of soils during construction. However, the project would be required to utilize best management practices (BMPs) and comply with the National Pollutant Discharge Elimination System (NPDES) stormwater quality requirements. The project area is urbanized and the proposed project is consistent with current runoff conditions and would not 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?

Less Than Significant Impact. According to the Flood Insurance Rate Map (FIRM), published by the Federal Emergency Management Agency (FEMA), the project area is not located within a 100-year floodplain area. No impacts in this regard are anticipated.



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).

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?

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

j) Inundation by seiche, tsunami, or mudflow?

*No Impact.* No significant water features have been identified in 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 land use and zoning designations, including residential, commercial, business and industrial uses. The area is within the Lancaster Central Business District and is part of the overall Transit Village planning area adopted and incorporated as part of the City's General Plan in December 2001. The area is predominately built-out, however vacant parcels and blighted areas currently exist. The project proposes the integration of land uses by placing land uses that compliment each other in close proximity, centrally locating public open space and placing service organizations with transit dependent patrons near transit systems. Thus significant impacts are not anticipated in this regard.

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?

*Less Than Significant Impact.* The project area is part of the overall Transit Village Planning area adopted as part of the City's General Plan in December 2001. The proposed project is consistent with the City's General Plan and Zoning Map. The project encourages transit-oriented development through the flexibility of land uses and a pedestrian friendly environment.

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?



**No Impact.** According to the City's General Plan MEA/EIR, the project area does not contain any mineral deposits or other mineral resources. Therefore, no significant impacts are anticipated in this regard.

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?

**No Impact.** The City's General Plan MEA/EIR does not identify the project area as an important mineral resource recovery site. No significant impacts are anticipated in this regard.

# **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, exposing adjacent uses to noise levels between 70 and 90 decibels at 50 feet from the noise source. Long-term 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.

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

**Potentially Significant Impact.** The project may include extensive earthwork and grading to prepare the project area for installation of infrastructure and for site development. Further review will be 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?

**No Impact.** Refer to Response 4.7(e). The project area is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, project implementation would not 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?

**No Impact.** The nearest private airstrip is General William J. Fox Airfield located approximately six miles from the project area. Exposure of people residing or working in the project area to excessive noise levels is not anticipated as a result of project implementation.

# **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 infill residential development in addition to the rehabilitation and expansion of existing structures such as the Sacred Heart onsite uses. The expansion of school, park and service facilities along with improvements to various roadways and infrastructures requires further analysis to determine the growth inducing potential of the project.

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

**Potentially Significant Impact.** The project area is part of two redevelopment project areas, the Central Business District Redevelopment Project area and Redevelopment Project Area No. 5. The proposal includes rehabilitation of existing housing structures and infill development. The removal of residential units is also proposed. Although new housing would be introduced, relocation of existing residents may be necessary. Further analysis regarding relocation and replacement housing is required.

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

Potentially Significant 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 Los Angeles County Fire Department (LACFD) provides fire protection services to the project area. Due to the location and nature of the project, including proposed street closures, additional analysis and consultation with the Fire Department will be required.

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# 2) Police protection?

**Potentially Significant Impact.** The County of Los Angeles Sheriff's Department provides police protection for the area. Due to the location and nature of the project, police protection needs may be affected. Additional analysis will be required.

3) Schools?

**Potentially Significant Impact.** The proposed project includes the addition of a school facility as well as the expansion of an existing school facility in the local area. The potential impact of additional students attending schools requires additional analysis.

4) Parks?

**Potentially Significant Impact.** The project proposes a shared park facility including athletic fields, ball courts and open space areas. Currently, there are no park and recreation facilities in the area. The park facility would be utilized by the two adjacent schools during school hours and would be open for public use after school hours. Further evaluation of the project's ability to meet public recreation facility requirements will be necessary.

# 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. Currently there are limited amounts of traffic generation in the project area. The addition and expansion of school and church facilities would introduce greater traffic levels during morning and afternoon peak periods. Additionally the new circulation configuration, which includes the closure of



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roadways, requires further analysis to assess the impact on traffic and circulation in the area.

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.** The proposed project would not affect air traffic patterns and would not result in safety risks should air traffic levels increase due to an increase in visitors associated with the project.

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.** Improvement plans for the area are subject to further review to evaluate the operations of internal circulation in parking areas and driveways. Compliance with City standards would reduce potential impacts to less than significant.

e) Result in inadequate emergency access?

Potentially Significant Impact. Refer to Response 4.7(g).

f) Result in inadequate parking capacity?

*Less Than Significant Impact.* Parking requirements for the project area would be subject to City standards and requirements.

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

*Less Than Significant Impact.* No conflicts with any adopted policies supporting alternative transportation are anticipated to occur. The project area is part of the Transit Village planning area, encouraging transit oriented development and uses. The City would impose standard conditions regarding transportation facilities, which may include bus turnouts, bicycle racks and bicycle lanes.

# **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 County of Los Angeles Sanitation District, City of Lancaster and the County of Los Angeles Department of Public Works provides sanitation service for the project area. 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.** Water purchased by Antelope Valley-East Kern Water Agency (AVEK) from the State Water Project (SWP) is supplied to the project area. The project proposes evaluation of existing infrastructure with possible upsizing and modifications to the water system. Modifications of pipeline routes are anticipated due to proposed street closures. The extent of modifications will require further review to determine the extent of physical impacts associated with improvements.

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?

Less Than 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 may generate increased amounts of solid waste, beyond the existing conditions. Waste Management of Lancaster provides disposal of solid waste from the project area. 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.** The project must comply with adopted programs and regulations pertaining to solid waste. Further evaluation will be required. Refer also to Response 4.16(f).

# 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?



**No Impact.** The project area is urbanized and predominately built-out. No fish or wildlife habitat exists within this area. Due to the level of past disturbance, no special status plant or animal species exist.

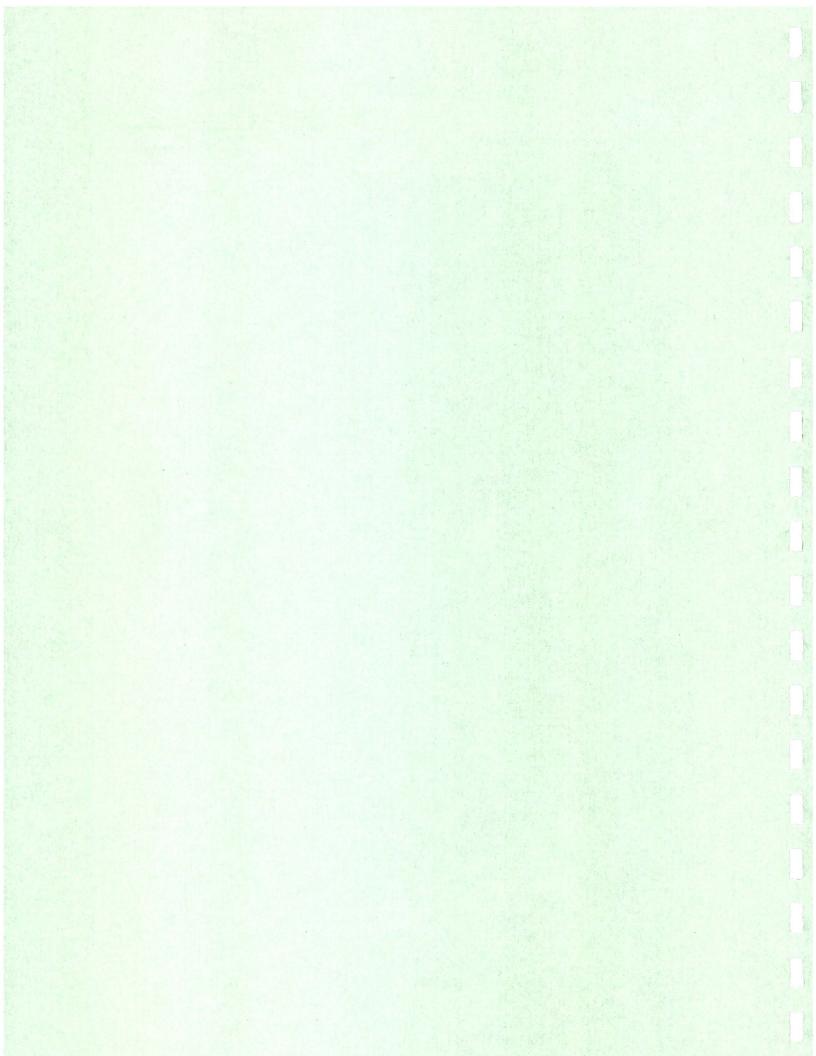
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects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





1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044

# Governor's Office of Planning and Research CONSULTIN

# State Clearinghouse

**Notice of Preparation** 

Tal Finney INTERIM DIRECTOR

To: Reviewing Agencies

October 21, 2002

Re: North Downtown Neighborhood Revitalization/Transit Village Plan SCH# 2002101100

Attached for your review and comment is the Notice of Preparation (NOP) for the North Downtown Neighborhood Revitalization/Transit Village 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:

Brian Ludicke City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534-2461

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,

Deekstrank Becky Frank Project Analyst, State Clearinghouse

Attachments cc: Lead Agency



Gray Davis

GOVERNOR

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COMPROVINGER

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# Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	<b>2002101100</b> North Downtown Neighborhood Revitaliz Lancaster, City of	ation/Transit Village Plan			
Туре	NOP Notice of Preparation				
Description	The proposed project involves the development of an in-fill affordable housing, redevelopment of commercial retail and modifications to existing street patterns which includes construction of a new street and closure of certain streets. In addition entities are proposing development of a christian school, construction of a children's counseling facility, expansion of a church/school and related ancillary facilities and construction of a mental health facility. A 10 to 12-acre park is proposed as the core focus of the plan.				
Lead Agenc	cy Contact				
Name	Brian Ludicke				
Agency	City of Lancaster				
Phone	661 723-6119	Fax			
email					
Address	44933 North Fern Avenue Lancaster	State CA	7:n 02524 0461		
City	Lancaster	State CA	<b>Zip</b> 93534-2461		
Project Loca	ation				
County	Los Angeles				
City	Lancaster				
Region					
Cross Streets Parcel No.	Avenue I/North Sierra Highway/10th Stre	et west/Kettering Street			
Township	Range	Section	Base		
		Section	Base		
Proximity to	):	Section	Base		
Proximity to Highways		Section	Base		
Proximity to Highways Airports	<b>):</b> 14, 138	Section	Base		
Proximity to Highways Airports Railways	):	Section	Base		
Proximity to Highways Airports	<b>):</b> 14, 138	Section	Base		
Proximity to Highways Airports Railways Waterways	<b>):</b> 14, 138	Section	Base		
Proximity to Highways Airports Railways Waterways Schools	0: 14, 138 Union Pacific	uality; Archaeologic-Histo ologic/Seismic; Job Gene ower Capacity; Soil Erosio getation; Water Quality; W	oric; Forest Land/Fire Hazard; Flood eration; Housing; Minerals; Noise; on/Compaction/Grading; Solid Waste;		
Proximity to Highways Airports Railways Waterways Schools Land Use	2: 14, 138 Union Pacific Residential, Commercial, Institutional Aesthetic/Visual; Agricultural Land; Air O Plain/Flooding; Drainage/Absorption; Ge Public Services; Schools/Universities; So Toxic/Hazardous; Traffic/Circulation; Veg	Puality; Archaeologic-Histo ologic/Seismic; Job Gene ower Capacity; Soil Erosio getation; Water Quality; W pulative Effects eservation; Department of and Game, Region 5; Na Commission; Caltrans, D pway Patrol; Air Resource	pric; Forest Land/Fire Hazard; Flood eration; Housing; Minerals; Noise; pn/Compaction/Grading; Solid Waste; /ater Supply; Wetland/Riparian; Parks and Recreation; Department ative American Heritage Commission; District 7; Department of Housing and es Board, Transportation Projects;		

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NOTICE OF COMPLETION ENVIRONMENTAL DOCUMENT TRAN Mail to: State Clearinghouse, 1400 Tenth Street, Room 121, Sac	See NOTE below SCH #					
1. PROJECT TITLE: North Downtown Neighborhood Revitalization/	Transit Village Plan					
2. Lead Agency: City of Lancaster	3. Contact Person: Brian Ludicke					
3a. Street Address: 44933 North Fern Avenue	3b. City: Lancaster 20	021	01100			
3c: County: Los Angeles 3d: Zip:93534-2461	3e. Phone: (661) 723-6119					
PROJECT LOCATION:						
4. County: Los Angeles 4a. City/Community: Lancaster						
4b. Assessor's Parcel No.: Multiple	4c. Section: Twp.:		Range:			
5a. Cross Streets: Avenue I/North Sierra Hwy/10th Street West/Kettering S	it. 5b. For Rural, Nearest Community: N/A					
6. Within 2 miles: a. State Hwy #: 14, 138	c. Airports: N/A					
c. Railways: Union Pacific	d. Waterways:					
7. DOCUMENT TYPE						
CEQA: 01. X NOP 05. Supplemental/Subsequent EIR	NEPA: 09. NOI OTH	IER: 13.	Joint Document			
(Prior SCH No.:			First Descent			
02. Early Cons 06. NOE		14.	Final Document			
03. Neg Dec 07. NOC	11. Draft EIS	15.	Other: Park, School Site			
04Draft EIR08NOD	<u>12.</u> <u>EA</u>					
8. LOCAL ACTION TYPE		12				
01. General Plan Update 05. Annexation	09. Rezone	12.	Waste Mgment Plan			
02. New Element 06. Specific Plan	10. Land Division (Subdivision, Parcel Map,	13.	Cancel Ag Preserve			
03. General Plan Amendment 07. Community Plan	Tract Map, Etc.)	14.	Other: Specific Plan Amendment			
04. X Master Plan 08. X Redevelopment	11. Use Permit					
9. DEVELOPMENT TYPE						
01. Residential: Units: Acres:	07. Mining:	Minera				
02. Office: S.F.: Acres: $\mathbf{REO}$		Type:	Watts:			
03. Shopping/Commercial: S.F.: Acres: Employ		it: <i>Type:</i>				
	veas: 2002 10. OCS Related:					
05. Water Facilities: MGD:	11. X Other:	Mixed	Use			
10. TOTAL ACRES: Approximately 110 acres 11. TOTAL JOBS CREATED: To be determined						
12. PROJECT ISSUES DISCUSSED IN DOCUMENT			1			
01. X Aesthetics/Visual 09. X Geologic/Seismic	17. Social	25. X	Wetlands/Riparian			
02. X Agricultural Land 10. X Jobs/Housing Balance	e 18. X Soil Erosion	26. X	Wildlife			
03. X Air Quality 11. X Minerals	19. X Solid Waste	27. X	Growth Inducing			
04. X Archaeological/Historical 12. X Noise	20. X Toxic/Hazardous	28. X	Incompatible Land Use			
05. Coastal Zone 13. X Public Services	21. X Traffic/Circulation	29. X	Cumulative Effects			
06. Economic 14. X Schools	22. X Vegetation	30.	Other			
07. X Fire Hazard 15. Septic Systems	23. X Water Quality					
08. X Flooding/Drainage 16. X Sewer Capacity	24. X Water Supply					
13. FUNDING (Approx.) Federal \$ To Be Determined	State \$ To Be Determined To	otal \$ To I	Be Determined			
14. PRESENT LAND USE AND ZONING: Residential, Commercial, Institutional						

15. PROJECT DESCRIPTION: The proposed project involves the development of in-fill affordable housing, redevelopment of commercial retail and modifications to existing street patterns which includes construction of a new street and closure of certain streets. In addition, entities are proposing development of a christian school, construction of a children's counseling facility, expansion of a church/school and related ancillary facilities and construction of a mental health facility. A 10 to 12-acre park is proposed as the core focus of the plan.

#### 16. SIGNATURE OF LEAD AGENCY REPRESENTATIVE:

17 07 DATE: 0 10 Glenn Lajoie, AICP, Lead Agency Representative

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Resources Agency	Fish and Game	Gerald R. Zimmerman	Dept. of Transportation 10 Tom Dumas District 10	State Water Resources Contro Board Greg Frantz
<ul> <li>Resources Agency Nadell Gayou</li> <li>Dept. of Boating &amp; Waterways Bill Curry</li> </ul>	<ul> <li>Dept. of Fish &amp; Game Scott Flint Environmental Services Division</li> <li>Dept. of Fish &amp; Game 1</li> </ul>	Tahoe Regional Planning Agency (TRPA) Lyn Barnett	<ul> <li>Dept. of Transportation 11         Bill Figge         District 11     </li> <li>Dept. of Transportation 12</li> </ul>	Division of Water Quality State Water Resouces Control Board Mike Falkenstein
California Coastal Commission Elizabeth A. Fuchs	Donald Koch Region 1 Dept. of Fish & Game 2	Office of Emergency Services John Rowden, Manager	Bob Joseph District 12	Division of Water Rights Dept. of Toxic Substances Co CEQA Tracking Center
Dept. of Conservation Roseanne Taylor	Banky Curtis Region 2 Dept. of Fish & Game 3	Delta Protection Commission Debby Eddy	Business, Trans & Housing Housing & Community Development	Regional Water Quality Contr Board (RWQCB)
Dept. of Forestry & Fire Protection Allen Robertson	Robert Floerke Region 3 Dept. of Fish & Game 4	Santa Monica Mountains Conservancy Paul Edelman	Cathy Creswell Housing Policy Division Caltrans - Division of Aeronautics	RWQCB 1 Cathleen Hudson
Preservation Hans Kreutzberg	William Laudermilk Region 4 Dept. of Fish & Game 5	Dept. of Transportation	Sandy Hesnard California Highway Patrol Lt. Julie Page	North Coast Region (1) RWQCB 2 Environmental Document
Dept of Parks & Recreation B. Noah Tilghman Environmental Stewardship Section	Don Chadwick Region 5, Habitat Conservation Program	Dept. of Transportation 1 Mike Eagan District 1	Office of Special Projects Dept. of Transportation Ron Helgeson	Coordinator San Francisco Bay Region (2) RWQCB 3
Reclamation Board Pam Bruner	Dept. of Fish & Game 6 Gabrina Gatchel Region 6, Habitat Conservation	Dept. of Transportation 2 Don Anderson District 2	Caltrans - Planning Dept. of General Services Robert Sleppy	Central Coast Region (3) <b>RWQCB 4</b> Jonathan Bishop
S.F. Bay Conservation & Dev't. Comm. Steve McAdam	Program Dept. of Fish & Game 6 I/M Tammy Allen	Dept. of Transportation 3 Jeff Pulverman District 3	Environmental Services Section Air Resources Board	Los Angeles Region (4) RWQCB 5S Central Valley Region (5)
Dept. of Water Resources Resources Agency Nadell Gayou	Region 6, Inyo/Mono, Habitat Conservation Program Dept. of Fish & Game M	Dept. of Transportation 4 Jean Finney District 4	<ul> <li>Airport Projects</li> <li>Jim Lerner</li> <li>Transportation Projects</li> </ul>	RWQCB 5F Central Valley Region (5) Fresno Branch Office
Health & Welfare	Tom Napoli Marine Region Independent Commissions	Dept. of Transportation 5 David Murray District 5	Kurt Karperos Industrial Projects Mike Tollstrup	Central Valley Region (5) Redding Branch Office
Health & Welfare Wayne Hubbard Dept. of Health/Drinking Water	California Energy Commission Environmental Office	Dept. of Transportation 6 Marc Birnbaum District 6	California Integrated Waste Management Board	RWQCB 6 Lahontan Region (6)
Food & Agriculture	Native American Heritage Comm. Debbie Treadway	Dept. of Transportation 7 Stephen J. Buswell District 7	Sue O'Leary State Water Resources Control Board	Lahontan Region (6) Victorville Branch Office RWQCB 7
<b>Food &amp; Agriculture</b> Steve Shaffer Dept. of Food and Agriculture	Public Utilities Commission Ken Lewis	Dept. of Transportation 8 Linda Grimes, District 8	Diane Edwards Division of Clean Water Programs	Colorado River Basin Region (7
	<ul> <li>State Lands Commission Betty Silva</li> <li>Governor's Office of Planning &amp; Research</li> </ul>	Dept. of Transportation 9 Katy Walton District 9		Santa Ana Region (8) RWQCB 9 San Diego Region (9)

# TATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION DISTRICT 7, REGIONAL PLANNING IGR/CEQA BRANCH 120 S. SPRING STREET LOS ANGELES, CA 90012 PHONE (213) 897-4429 FAX (213) 897-1337

Flex your power! Be energy efficient!

October 29, 2002

IGR/CEQA cs/021076 NOP City of Lancaster North Downtown Neighborhood Revitalization/Transit Village Plan Lancaster Ave./Sierra Hwy. Vic. LA-14-R68.77 SCH# 2002101100

Mr. Brian Ludicke City of Lancaster 44933 N. Fern Ave. Lancaster, CA 93534

Dear Mr. Ludicke:

Thank you for including the California Department of Transportation in the environmental review process for the above-mentioned project. Based on the information received, we have the following comments:

A traffic study will be needed to evaluate the project's overall impact on the State transportation system including State Route 14 (Antelope Valley Freeway) and all affected freeway on/off ramps. Refer to the Caltrans Guide for the Preparation of Traffic Impact Studies for accepted traffic impact analysis methodologies. The Guide can be found on the internet at:

http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

- Assumptions used to develop trip generation/distribution percentages and assignments.
- 2) An analysis of ADT, AM and PM peak hour volumes for both the existing and future (year 2020) conditions. This should also include, but not be limited to, level-of-service calculations:

Existing traffic volumes Existing level-of-service (LOS) calculations Future traffic volumes projections for year 2020 Cumulative level-of-service (LOS) calculations

3) Any mitigation measures proposed to alleviate traffic impact should include, but not be limited to the following:

Financing Scheduling considerations Implementation responsibilities Monitoring plan Mr. Brian Ludicke October 29, 2002 Page Two

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4) We recommend the implementation of a fair-share funding program on a pro rata basis to be used for traffic improvement projects resulting from additional trips generated by future projects.

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- 5) All applicable transportation related safety measures will need to be implemented for school sites. We recommend the use of multi-passenger vehicles to transport students to and from school facilities.
- 6) We would appreciate advance copies of the DEIR and traffic study to facilitate internal Departmental review. Copies should be sent to the undersigned :

c/o Stephen Buswell, IGR/CEQA Program Manager California Department of Transportation District 7, Office of Regional Planning 120 South Spring Street Los Angeles, CA 90012

If you have any questions regarding our comments, refer to our internal IGR/CEQA Record # cs/021076, and please do not hesitate to contact me at (213) 897-4429.

Sincerely,

STEPHEN BUSWELL IGR/CEQA Branch Chief

cc: Mr. Scott Morgan, State Clearinghouse

#### SOUTHERN CALIFORNIA



#### ASSOCIATION of GOVERNMENTS

#### Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

#### www.scag.ca.gov

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s Angeles County: Yvonne Brathwaite Burke, Los Angeles County · Zev Yaroslavsky, Los Angeles County · Melanie Andrews, Compton · Harry Baldwin San Gabriel . Bruce Barrows Cerritos orge Bass, Bell • Hal Bernson, Los Angeles • Ken ckwood, Lomita . Robert Bruesch, Rosemead . ne Daniels, Paramount . Ruth Galanter, Los geles • Mike Dispenza, Palmdale • Judy Dunlap, Inglewood • Eric Garcetti, Los Angeles • Wen Greuel, Los Angeles · James Hahn, Los Angeles ice Hahn, Los Angeles • Nate Holden geles • Sandra Jacobs, El Segundo • konge, Los Angeles • Bonnie Lowenthal, Long Ich • Keith McCarthy, Downey • Cindy Miscikowski, Los Angeles • Pam O'Connor, Santa Monica • Nick Pacheco, Los Angeles • Alex Padilla, : Angeles • Jan Perry, Los Angeles • Beatrice 10, Pico Rivera • Mark Ridley-Thomas, Los geles • Ed Reyes, Los Angeles • Karen Rosenthal, remont • Dick Stanford, Azusa • Tom Sykes, ...alnut • Paul Talbot, Alhambra • Sidney Tyler, Jr., Pasadena • Dennis Washburn, Calabasas • Jack Weiss, Los Angeles • Bob Yousefian, Glendale • nnis P. Zine, Los Angeles

ange County: Charles Smith, Orange County • n Bates, Los Alamitos • Ralph Bauer, Huntington Beach • Art Brown, Buena Park • Lou Bone, Tustin • Eltzabeth Cowan, Costa Mesa • Cathryn De Young, una Niguel • Richard Dixon, Lake Forest • Alta ke, La Palma • Shirley McCracken, Anaheim • / Perry, Brea • Tod Ridgeway, Newport Beach

rerside County: Bob Buster, Riverside County \* Ron Loveridge, Riverside \* Greg Pettis, Cathedral City \* Ron Roberts, Temecula \* Jan Rudman, Irona \* Charles White, Moreno Valley

n Bernardino County: Jon Mikels, San rnardino County • Bill Alexander, Rancho Cucamonga • Lawrence Dale, Barstow • Lee Ann Garcia, Grand Terrace • Susan Lien, San Bernardino • Gary Ovitt, Ontario • Deborah Roberson, Rialto

atura County: Judy Mikels, Ventura County • :n Becerra, Simi Valley • Carl Morehouse, San enaventura • Toni Young, Port Hueneme

Riverside County Transportation Commission Robin Lowe, Hemet

ntura County Transportation Commission 1 Davis, Simi Valley November 5, 2002

Mr. Brian Ludicke Community Development Director City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534

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#### RE: SCAG Clearinghouse No. I 20020569 North Downtown Neighborhood Revitalization Transit Village Plan

Dear Mr. Ludicke:

Thank you for submitting the North Downtown Neighborhood Revitalization Transit Village Plan to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

We have reviewed the North Downtown Neighborhood Revitalization Transit Village Plan, and have determined that the proposed Project is not regionally significant per SCAG Intergovernmental Review (IGR) Criteria and California Environmental Quality Act (CEQA) Guidelines (Section 15206). The proposed project is not a residential development of more than 500 dwelling units. Therefore, the proposed Project does not warrant comments at this time. Should there be a change in the scope of the proposed Project, we would appreciate the opportunity to review and comment at that time.

A description of the proposed Project was published in SCAG's **October 16-31, 2002** Intergovernmental Review Clearinghouse Report for public review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this Project. Correspondence should be sent to the attention of the Clearinghouse Coordinator. If you have any questions, please contact me at (213) 236-1867. Thank you.

Sincerely,

FREY'M SMITH, AICP

Senior Regional Planner Intergovernmental Review



JAMES A. NOYES, Director

# **COUNTY OF LOS ANGELES**

# DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

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IN REPLY PLEASE

# RECEIVED

NOV - 8 2002

November 5, 2002

CITY OF LANCASTER

Mr. Brian Ludicke City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534-2461

Dear Mr. Ludicke:

# LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN

Thank you for the opportunity to review the Notice of Preparation of a Draft Environmental Impact Report for the North Downtown Neighborhood Revitalization Transit Village Plan. We have reviewed the document and concur that further evaluation of the effects on the existing water infrastructure is needed and that the resulting modifications could have a "potentially significant impact" on the environment.

Please contact Mr. George Papik at (626) 300-3349 concerning this matter.

Very truly yours,

JAMES A. NOYES Director of Public Works

BRIAN D. HOOPER Assistant Deputy Director Waterworks and Sewer Maintenance Division

GMP:lb ww3174

#### STATE OF CALIFORNIA

(916) 657-5390 - Fax

Gray Davis, Governor

#### NATIVE AMERICAN HERITAGE COMMISSION 915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-4082



November 5, 2002

Brian Ludicke City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534-2461

RE: SCH# 2002101100 – North Downtown Neighborhood Revitalization/Transit Village Plan, Lancaster, Los Angeles County

Dear Mr. Ludicke:

The Native American Heritage Commission 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 Native American Heritage Commission for:

- A Sacred Lands File Check. <u>Check Completed with negative results, 11/4/02</u>
- A list of appropriate Native American Contacts for consultation concerning the project site and to assist in the mitigation measures. <u>Native American Contacts List attached</u>

✓ 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,

Roblood

Rob Wood Environmental Specialist III (916) 653-4040

CC: State Clearinghouse

### NATIVE AMERICAN CONTACTS Los Angeles County November 5, 2002

Charles Cook 32835 Santiago Road Acton, 93510 C A (661) 269-1244

Chumash Fernandeno

Tataviam Kitanemuk

Chumash

Tataviam

Fernandeño

LA City/County Native American Indian Comm 3175 West 6th Street, Rm. 403 Los Angeles, 90020 C A

(213) 351-5308 (213) 386-3995 FAX

Beverly Salazar Folkes 1931 Shadybrook Drive Thousand Oaks, 91362 C A 805 492-7255 Ti'At Society Cindi Alvitre 15600 Mulholland Dr., Apt. K Bel Air, CA 90077 (310) 440-0245

San Manuel Band of Mission Indians Deron Marquez, Chairperson PO Box 266 Serrano Patton, CA 92369 (909) 864-8933 (909) 864-3370 Fax Bingo Hall:(909) 864-5050 Island Gabrielino Group John Jeffredo PO Box 669 Gabrielino San Marcos, CA 92079-0669 (760) 723-9279

Samuel H. Dunlap P.O. Box 1391 Temecula, 92593 C A (909) 699-5544 (Voice) (909) 262-9351 (Cell) (909) 693-9196 FAX

Gabrielino Cahuilla

Luiseno

Gabrielino Tongva Indians of California Tribal Council Robert F. Dorame, Chairperson PO Box 490 Gabrielino Tongva Bellflower, CA 90707 (562) 761-6417 - Voice

562 920-9449 - Fax

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 regards to the cultural assessment for the proposed SCH# 2002101100 - North Downtown Neighborhood Revitalization/Transit Village Plan, Lancaster, Los Angeles Counity.

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### NATIVE AMERICAN CONTACTS Los Angeles County November 5, 2002

Alfred L. Valenzuela hn Valenzuela 18678 Pad Court Chumash PO Box 402597 Chumash 91321 Newhall. Tataviam 92340 Tataviam esperia, CA CA Gabrielino Tongva, Gabrielino (661) 252-1486 Home (760) 949-2103 Home Kitanemuk Vanyume: Serrano (661) 755-8314 Work Kitanemuk Vanyume ; Serrano abrieleno/Tongva Tribal Council **Jim Velasques** Anthony Morales, Chairperson 5776 42nd Street Gabrielino **D Box 693** Riverside, 92509 Kumeyaay Gabrieleno Tongva CA an Gabriel. CA 91778 (909) 784-6660 (526) 286-1632 326) 286-1262 Fax 326) 286-1758 (Home) Gabrielino/Tongva Tribal Council of the Gabrielino Tongva Nation **Uraig** Torres -13 E. Bishop 501 Santa Monica Blvd., Suite 500 Gabrieleno Tongva Gabrielino Tongva Santa Monica, 90401-2415 92701 anta Ana.

CA

714) 542-6678

(310) 587-2203 (310) 587-2281 Fax

Randy Guzman - Folkes 839 Paloma Dr. Chumash 'entura, 93003 Fernandeño C A 805) 654-9923 (Work) Tataviam

CA

805) 654-9923 (Work) 305) 797-5605 (cell) traditional75@hotmail.com Email Yaqui

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 regards to the cultural assessment for the proposed SCH# 2002101100 - North Downtown Neighborhood Revitalization/Transit Village Plan, Lancaster, Los Angeles Counity.



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998 Telephone: (562) 699-7411, FAX: (562) 699-5422 www.lacsd.org

# JAMES F. STAHL Chief ERECENED

November 7, 2002

NOV 1 2 2002

File No: 14-00.04-00 COMMUNITY DEVELOPMENT

Mr. Brian Ludicke Community Development Director City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534

Dear Mr. Ludicke:

### North Downtown Neighborhood Revitalization Transit Village Plan

The County Sanitation Districts of Los Angeles County (Districts) received a <u>Notice of Preparation</u> <u>of a Draft Environmental Impact Report</u> for the subject project on October 21, 2002. We offer the following comments regarding sewerage service:

- 1. A majority of the project area is within the jurisdictional boundaries of District No. 14, however, six parcels are outside the District. Unless served by on-site septic systems, two developed parcels (APNs 3133001004 and 3133029004) will require immediate annexation into District No. 14 and the payment of connection fees. Two developed parcels (APNs 3133029906 and 3133029907) are being served by the District under Contract No. 894 and will not require annexation at this time. The remaining two undeveloped parcels (APNs 3133001009 and 3133001800) will require annexation into the District before sewerage service can be provided to the proposed development. For specific information regarding the annexation procedure and fees, please contact Ms. Margarita Cabrera at extension 2708. Copies of the Districts' Annexation Information and Processing Fees sheets are enclosed for your convenience.
- 2. Individual developments within the project area should be reviewed by the Districts in order to determine whether or not sufficient trunk sewer capacity exists to serve each development.
- 3. A copy of the Districts' average wastewater generation factors is enclosed to allow you to estimate the volume of wastewater the project will generate.
- 4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to

#### Mr. Brian Ludicke

connect to the sewer is issued. A copy of the Connection Fee Information Sheet is enclosed for your convenience. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform with the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into the Air Quality Management Plan, which is prepared by the South Coast Air Quality Management District in order to improve air quality in the South Coast Air Basin as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

James F. Stahl

HIJ. Frazon

Ruth I. Frazen Engineering Technician Planning & Property Management Section

RIF:rf

Enclosures

c: M. Cabrera

# INFORMATION SHEET FOR APPLICANTS REQUESTING ANNEXATION TO A COUNTY SANITATION DISTRICT OF LOS ANGELES COUNTY

# A. ELIGIBILITY CRITERIA FOR ANNEXATION TO A COUNTY SANITATION DISTRICT OF LOS ANGELES COUNTY

- 1) The property is contiguous to said County Sanitation District or, if not contiguous, may be drained by gravity to a trunk sewer of that District,
- 2) The property is not included in whole or in part in any other agency providing services similar to those of the said County Sanitation District, and
- 3) The property is to be benefitted by its inclusion in the said County Sanitation District.

#### B. HOW DO I INITIATE THE ANNEXATION APPLICATION PROCESS?

1 .

1a)WRITE TO:County Sanitation Districts of Los Angeles County<br/>P.O. Box 4998, Whittier, CA 90607<br/>Attn: Annexation Fee Program

The letter should contain the following information and support documentation about the property involved:

- i) Property location (street address, city, zip and Thomas Brothers map, page, grid)
- ii) In case of a recorded single lot, include the County Assessor's mapbook-page-parcel map with the parcel highlighted.
- iii) In case of a tract or parcel map, include a copy of the tentative or final map plus a closed-survey engineering traverse around the boundary to be annexed to the centerline of any public street.
- 1b) <u>CALL</u> County Sanitation Districts of Los Angeles County (See Item F for details)
- 2) Districts' staff will calculate the acreage involved and will provide the applicant with a quote of annexation fees to be paid. At this time, the applicant will also be provided with a *"Request for Annexation"* form along with necessary instructions.
- 3) An annexation application file will be opened upon submittal by applicant of all the required documents (refer to Section C) along with a check for the annexation fee made payable to:

County Sanitation Districts of Los Angeles County

### C. WHAT DOCUMENTS DO I NEED TO FILE?

1) **"Request for Annexation" Form (5 pages):** All applicants must complete, in detail, and return the Request for Annexation form signed by the legal owner whose name appears on the current Los Angeles County assessment roll. See C4) for assistance in completing pages 4 and 5 of this form.

- 2) Los Angeles County Local Agency Formation Commission Party Disclosure Form: All applicants must complete and return the Party Disclosure Form pursuant to the Local Agency Formation Commission Party Disclosure Form Information Sheet.
- 3) Annexation Fee payment as stated in the quotation letter.
- 4) **Copy of Grant Deed** (Applicants must submit a copy of the Grant Deed which includes the legal description. Disregard this request if the proposed project is a tract/parcel map.)
- 5) California Environmental Quality Act (CEQA) All applicants are subject to CEQA. If the project is a single family home on septic tank, the project is exempt and the Notice of Exemption will be prepared by this office. All other applicants must provide two (2) copies of the Initial Study of Environmental Assessment and fourteen (14) copies each of the Negative Declaration and Notice of Determination approved by the affected city or by County Regional Planning. Or, two (2) copies each of the Final Environmental Impact Report (EIR) and the Notice of Determination approved by the affected city or by County Regional Planning Commission.

#### D. HOW MUCH DO I HAVE TO PAY?

The annexation fee consists of three processing fees. The **Annexation Processing Fees** table is attached. The Sanitation Districts, as the lead agency for the annexation, will collect the processing fees at time of annexation application. The three processing fees are for: 1) County Sanitation Districts of Los Angeles County (CSD), 2) Local Agency Formation Commission (LAFCO), and 3) State Board of Equalization (SBE). The LAFCO and SBE processing fees are subject to change without notice. If their fees increase before your application is processed by this office for submittal to these agencies, then you will be notified and the additional monies must be paid before the annexation procedure can be finalized.

#### E. HOW LONG DOES IT TAKE TO PROCESS MY ANNEXATION APPLICATION?

If the project is a recorded single family lot, Districts' staff will begin processing the annexation application as soon as the required forms are submitted and the annexation fees paid. Upon payment of the annexation fees, for all Sanitation Districts except 26 & 32, the applicant may pay the connection fees and proceed with the project.

If the project is a tract or parcel map, Districts' staff will begin processing the annexation application as soon as the required forms, annexation fees and a copy of the recorded tract/parcel map blueline are submitted. Upon payment of annexation fees, the applicant may have the original sewer map signed off. Also, for all Sanitation Districts except 26 & 32, the applicant may pay the connection fees. The annexation procedure cannot be completed until after receipt, in this office, of the recorded tract/parcel blueline map.

#### F. WHERE CAN I GET ADDITIONAL INFORMATION?

For additional information, please call:

County Sanitation Districts of Los Angeles County (562) 699-7411, extension 2708 7:00 a.m. through 4:30 p.m., Monday through Thursday 7:00 a.m. through 3:30 p.m., Fridays, except holidays

# ANNEXATION PROCESSING FEES FOR THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

COUNTY SANITATION DISTRICTS' PROCESSING FEE		ACREAG	E	FEE
	0.0	to	1.5	\$800
	>1.5	to	5.0	\$1,075
	>5.0	to	20.0	\$215/Acre
		Over 20.0	2010	\$4,300
				Plus \$35/Additional Acre And Every Fraction Thereof
LOCAL AGENCY FORMATION COMMISSION FILING FEE		ACREAG	English and the	restant and the second se
ANNEXATIONS AND DETACHMENTS	0.0	to	3.0 Acres	\$2,000
	3.0	to	5.0	\$2,500
	5.0	to	10.0	\$3,000
	10.0	to to	20.0	\$3,500
	20.0	to	40,0	\$4,000
	40.0	in to the second	80.0	\$5,000
	80.0	to	160.0	\$6,000
OTHER PROPOSITIO		160.0+ Acres		\$7,000
OTHER PROPOSALS	Incomparatio		ecial Reorganization ration/Consolidation	\$10,000 \$7,500
	Incorporado	In Districtipol	District Formation	\$7,500
	District I	Dissolution/C	onsolidation/Merger	\$5,000
				\$2,000
	District Dissolution for Inactivity Establishment of Subsidiary District			\$3,500
	L3	Reorganizations		
	Detachments Due to Lack of Service			Basic Fee + 20% \$1,000
	Establishment of new Sphere of Influence			Basic Fee + 20%
	Sphere of Influence Amend./Review			Basic Fee + 20%
	Sphere of Influence Amend. w/Annexation			\$500
	Reconsideration of LAFCO Determinations			50% of Basic Fee
	Special District Study			Actual cost @ hourly rate
	0		Service Agreements	\$2,000
				\$300
	Map and Legal Description Review Petition Verification			Actual Cost, as required by Registrar-Recorder
	Notice/Radius Map			Actual Cost
STATE BOARD OF EQUALIZATION <sup>2</sup>		ACREAGE		EEE ANA
SINGLE AREA TRANSACTIONS	0.0	to	1.0	\$300
	1.0	to	5.0	\$350
	• 6.0	to	10.0	\$500
	11.0	to	20.0	\$800
	21.0	to	50.0	\$1,200
	51.0	to	100.0	\$1,500
	101.0	to	500.0	\$2,000
	501.0	to	1,000.0	\$2,500
	1,001.0 to 2,000.0			\$3,000
THER BRODOG & C	2,0	001.0 and abo		\$3,500
OTHER PROPOSALS	Deferral of Fees			\$35
	Additional County per Transaction			\$250
	Consolidation per District or Zone			\$300
	Entire District Transaction			\$300
	Coterminous Transaction			\$300
		Dissoluti	on or Name Change	\$0

<sup>1'</sup> Most recent LAFCO fee increase effective January 1, 2001.

<sup>2</sup> Most recent SBE fee increase effective December 2, 1998.

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# TABLE 1 LOADINGS FOR EACH CLASS OF LAND USE

.

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons <u>per Day)</u>	COD (Pounds <u>per Day)</u>	SUSPENDED SOLIDS (Pounds <u>per Day)</u>	
RESIDENTIAL	_				
Single Family Home	Parcel	260	1.22	0.59	
Duplex	Parcel	312	1.46	0.70	
Triplex	Parcel	468	2.19	1.05	
Fourplex	Parcel	624	2.92	1.40	15 16 10
Condominiums Single Family Home (reduced rate)	Parcel Parcel	195 156	0.92 0.73	0.44 0.35	Succession.
Five Units or More	No. of Dwlg. Units	156	0.73	0.35	
Mobile Home Parks	No. of Spaces	156	0.73	0.35	
		100		0.000	
COMMERCIAL	-				
Hotel/Motel/Rooming H	ouse Room	125	0.54	0.28	
Store	$1000 \text{ ft}^2$	100	0.43	0.23	
Supermarket	1000 ft <sup>2</sup>	150	2.00	1.00	
Shopping Center	1000 ft <sup>2</sup>	325	3.00	1.17	
Regional Mall	1000 ft <sup>2</sup>	150	2.10	0.77	
Office Building	1000 ft <sup>2</sup>	200	0.86	0.45	
Professional Building	1000 ft <sup>2</sup>	300	1.29	0.68	
Restaurant	1000 ft <sup>2</sup>	1,000	16.68	5.00	
Indoor Theatre	1000 ft <sup>2</sup>	125	0.54	0.28	
Car Wash	1000 52				
Tunnel - No Recycling		3,700	15.86	8.33	
Tunnel - Recycling Wand	1000 ft <sup>2</sup> 1000 ft <sup>2</sup>	2,700 700	11.74	6.16	
Financial Institution	$1000 \text{ ft}^2$	100	3.00 0.43	1.58	
Service Shop	$1000 \text{ ft}^2$	100	0.43	0.23 0.23	
Animal Kennels	$1000 \text{ ft}^2$	100	0.43	0.23	
Service Station	$1000 \text{ ft}^2$	100	0.43	0.23	
Auto Sales/Repair	$1000 \text{ ft}^2$	100	0.43	0.23	
Wholesale Outlet	1000 ft <sup>2</sup>	100	0.43	0.23	
Nursery/Greenhouse	1000 ft <sup>2</sup>	25	0.43	0.25	
Manufacturing	1000 ft <sup>2</sup>	200	1.86	0.70	
Dry Manufacturing	1000 ft <sup>2</sup>	25	0.23	0.09	
Lumber Yard	$1000 \text{ ft}^2$	25	0.23	0.09	
Warehousing	1000 ft <sup>2</sup>	25	0.23	0.09	
Open Storage	1000 ft <sup>2</sup>	25	0.23	0.09	
Drive-in Theatre	$1000 \text{ ft}^2$	20	0.23	0.05	
	2000 IL	20	0.09	0.05	

### INFORMATION SHEET FOR APPLICANTS PROPOSING TO CONNECT OR INCREASE THEIR DISCHARGE TO THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY SEWERAGE SYSTEM

### **THE PROGRAM**

The County Sanitation Districts of Los Angeles County are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting to a Sanitation District's sewerage system. Your connection to a City or County sewer constitutes a connection to a Sanitation District's sewerage system as these sewers flow into a Sanitation District's system. The County Sanitation Districts of Los Angeles County provide for the conveyance, treatment, and disposal of your wastewater. PAYMENT OF A <u>CONNECTION FEE</u> TO THE COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY WILL BE REQUIRED BEFORE A CITY OR THE COUNTY WILL ISSUE YOU A PERMIT TO CONNECT TO THE SEWER.

### I. WHO IS REQUIRED TO PAY A CONNECTION FEE?

- (1) Anyone connecting to the sewerage system for the first time any structure located on a parcel(s) of land within a County Sanitation District of Los Angeles County.
- (2) Anyone increasing the quantity of wastewater discharged due to the construction of additional dwelling units on or a change in land usage of a parcel already connected to the sewerage system.
- (3) Anyone increasing the improvement square footage of a commercial or institutional parcel by more than 25 percent.
- (4) Anyone increasing the quantity and/or strength of wastewater from an industrial parcel.
- (5) If you qualify for an Ad Valorem Tax or Demolition Credit, connection fee will be adjusted accordingly.

### II. HOW ARE THE CONNECTION FEES USED?

The connection fees are used to provide additional conveyance, treatment, and disposal facilities (capital facilities) which are made necessary by new users connecting to a Sanitation District's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program insures that all users pay their fair share for any necessary expansion of the system.

### III. HOW MUCH IS MY CONNECTION FEE?

Your connection fee can be determined from the Connection Fee Schedule specific to the Sanitation District in which your parcel(s) to be connected is located. A Sanitation District boundary map is attached to each corresponding Sanitation District Connection Fee Schedule. Your City or County sewer permitting office has copies of the Connection Fee Schedule(s) and Sanitation District boundary map(s) for your parcel(s). If you require verification of the Sanitation District in which your parcel is located, please call the Sanitation Districts' information number listed under Item IX below.

### IV. WHAT FORMS ARE REQUIRED\*?

The Connection Fee application package consists of the following:

November 12, 2002



P.O. BOX 1192 LANCASTER, CA 93584-1192

Board of Trustees

Joyce Axley Los Angeles County

Greg Hanes City of Lancaster

Barbara Little Los Angeles County

R. Dennis Persons City of Palmdale

Arnie Rodio Los Angeles County

District Manager

Cei D. Kratz

Office Location

42624 6<sup>th</sup> Street East Lancaster, CA 93535 Telephone: (661) 942-2917 Fax: (661) 940-6367 E-mail: <u>mosq2@earthlink.net</u> To: City of Lancaster Attn.: Brian Ludicke Director of Community Development 44933 N. Fern Avenue Lancaster, CA 93534 NOV 1 3 2002

CITY OF LANGASTER COMMUNITY DEVELOPMENT

Re: NOP North Downtown Neighborhood Revitalization/Transit Village Plan

Thank you for sending me the NOP for the North Downtown Revitalization/Transit Village Plan for review.

The project seems to have less than significant impact on the services of the Antelope Valley Mosquito & Vector Control District.

The only thing that I am concerned about is excess runoff water from the proposed park. Several other parks and school grounds in town are notoriously over-watering the landscaping, generating standing water on the grounds and in the street curbs and gutters surrounding the parks. This water can then produce mosquito breeding sites.

Please feel free to contact me for any further information.

Best regards,

Diellos

Karen S. Mellor Entomologist / Operations Supervisor Antelope Valley Mosquito & Vector Control District



### **COUNTY OF LOS ANGELES**

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

RECEIVED NOV 1 5 2002

CITY OF LANCASTER COMMUNITY DEVELOPMENT

P. MICHAEL FREEMAN FIRE CHIEF FORESTER & FIRE WARDEN

November 12, 2002

Brian Ludicke, Director of Community Development City of Lancaster Planning Department 44933 North Fern Avenue Lancaster, CA 93534-2461

Dear Mr. Ludicke:

### **ENVIRONMENTAL IMPACT REPORT -- NOTICE OF PREPARATION/INITIAL STUDY** (DRAFT), THE PROPOSED NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN, "CITY OF LANCASTER" -- (EIR #1512/2002)

The Notice of Preparation/Initial Study (Draft) for the proposed North Downtown Neighborhood Revitalization Transit Village Plan has been reviewed by the Planning Section, Land Development Unit, and Forestry Division of the County of Los Angeles Fire Department. The following are their comments:

### **PLANNING DIVISION:**

Any development will increase the service demand on existing resources. Although this development would be in proximity to existing fire stations, it would increase service demand on the existing fire protection resources in the general area. However, the degree of impact created by this project cannot be determined at this time.

The environmental document should specify the square footage of all new facilities and expansions -e.g., the Sacred Heart Catholic Church and the Desert Christian School.

### LAND DEVELOPMENT UNIT -- GENERAL REQUIREMENTS:

The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. The Department may condition future development to provide additional means of access.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and hydrants. Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.

AGOURA HILLS ARTESIA AZUSA BALDWIN PARK BELL BELL GARDENS BELLFLOWER

COVINA

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF: BRADBURY CUDAHY DIAMOND BAR CALABASAS DUARTE CARSON CERRITOS EL MONTE CLAREMONT GARDENA COMMERCE GLENDORA HAWAIIAN GARDENS

HAWTHORNE HIDDEN HILLS HUNTINGTON PARK INDUSTRY INGLEWOOD IRWINDALE LA CANADA-FLINTRIDGE

LA MIRADA LA PUENTE LAKEWOOD LANCASTER LAWNDALE LOMITA LYNWOOD

MALIBU MAYWOOD NORWALK PALMDALE PALOS VERDES ESTATES PARAMOUNT **PICO RIVERA** 

POMONA RANCHO PALOS VERDES ROLLING HILLS **ROLLING HILLS ESTATES** ROSEMEAD SAN DIMAS SANTA CLARITA

SIGNAL HILL SOUTH EL MONTE SOUTH GATE TEMPLE CITY WALNUT WEST HOLLYWOOD WESTLAKE VILLAGE WHITTIER

### Brian Ludicke, Director of Community Development November 12, 2002 Page 2

Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width, unobstructed, clear-to-sky. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

When involved with a subdivision, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.

Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

#### **NON-RESIDENTIAL- INSTITUTIONAL:**

Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

- 1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
- 2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.
- 3. Additional hydrants will be required if hydrant spacing exceeds specified distances.
- 4. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.
- 5. A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.
- 6. A Fire Department approved turning area shall be provided at the end of a cul-de-sac.

Turning radii shall not be less than 42 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. All on-site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:

### Brian Ludicke, Director of Community Development November 12, 2002 Page 3

- 1. Provide 28 feet in width, when a building has three or more stories, or is more than 35 feet in height, above access level. Also, for using fire truck ladders, the centerline of the access roadway shall be located parallel to, and within 30 feet of the exterior wall on one side of the proposed structure.
- 2. Provide 34 feet in width, when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.
- 3. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.
- 4. "Fire Lanes" are any ingress/egress, roadway/driveway with paving less than 34 feet in width, and will be clear-to-sky. All "Fire Lanes" will be depicted on the final map.
- 5. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

#### LIMITED ACCESS DEVICES (GATES ETC.):

All access devices and gates shall meet the following requirements:

- 1. Any single gate used for ingress and egress shall be a minimum of 26 feet in width, clear-to-sky.
- 2. Any gate used for a single direction of travel, used in conjunction with another gate, used for travel in the opposite direction, (split gates) shall have a minimum width of 20 feet each, clear-to-sky.
- 3. Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way, and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.
- 4. All limited access devices shall be of a type approved by the Fire Department.
- 5. Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates.

#### **TRAFFIC CALMING MEASURES:**

All proposals for traffic calming measures (speed humps/bumps, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review, prior to implementation.

Should any questions arise regarding design and construction, and/or water and access, please contact Inspector J. Scott Greenelsh at (323) 890-4235.

Brian Ludicke, Director of Community Development November 12, 2002 Page 4

#### FORESTRTY DIVISION - OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance.

The following analysis of information should be included in the Environmental Impact Report:

An archaeological and historical records check and field survey should be conducted to determine potential impacts to these resources.

The second

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

DAVID R. LEININGÉR, CHIEF, FORESTRY DIVISION PREVENTION BUREAU

DRL:lc



**'inston H. Hickox** 

otection Agency

alifornia Environmental

Agency Secretary

Edwin F. Lowry, Director 1011 N. Grandview Avenue Glendale, California 91201



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Gray Davis Governor

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CITY OF LANCASTER COMMUNITY DEVELOPMENT

Mr. Brian Ludicke Community Development Director City of Lancaster 44933 North Fern Avenue Lancaster, California 93534-2461

NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/TRANSIT VILLAGE PLAN, SCH NO. 2002101100

Dear Mr. Ludicke:

November 15, 2002

The Department of Toxic Substances Control (DTSC) has received your Notice of Preparation of a draft Environmental Impact Report (EIR) for the project mentioned above.

Based on the review of the document, DTSC comments are as follows:

- 1. The draft EIR needs to identify and determine whether current or historic uses at the Project site have resulted in any release of hazardous wastes/substances at the Project area.
- 2. The draft EIR needs to identify any known or potentially contaminated site within the Project area. For all identified sites, the draft EIR needs to evaluate whether conditions at the site pose a threat to human health or the environment.
- 3. The draft EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.
- 4. If during construction of the project, soil contamination is suspected, construction in the area should stop, and appropriate health and safety procedures should be implemented. If it is determined that contaminated soils exists, the draft EIR

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov. Mr. Brian Ludicke November 15, 2002 Page 2

> should identify how any required investigation and/or remediation will be conducted, and which government agency will provide regulatory oversight.

DTSC provides guidance for Preliminary Endangerment Assessment preparation and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact Mr. Alberto Valmidiano, Project Manager, at (818) 551-2870 or me, at (818) 551-2877.

Sincerely,

Would R. Jecke

Harlan R. Jeche Unit Chief Southern California Cleanup Operations Branch – Glendale Office

Enclosure

cc: Governor's Office of Planning and Research State Clearinghouse P.O. Box 3044 Sacramento, California 95812-3044

> Mr. Guenther W. Moskat, Chief Planning and Environmental Analysis Section CEQA Tracking Center Department of Toxic Substances Control P.O. Box 806 Sacramento, California 95812-0806

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### Department of Toxic Substances Control



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Agency Secretary	Sacramento, California	95812-0806		Governor
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TO:	Sayareh Amirebrahmi, Branch Chief			
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FROM:	Guenther W. Mosket Chief Planning and Environmental Analysis Section	חמ		
DATE:	October 29, 2002	-		
SUBJECT:	TRANSMITTAL AND REVIEW OF LEAD AC	SENCY ENVIRONMENTAL DO	CUMENTS FOR	
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The Department is	encouraged to review the project and if applicable	make comments pertaining to the	project as it relates	to hazardous
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COMMENTS have	been prepared and a copy has been provided to P	EAS via:		
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□ Attached Cop → FAX (916) 323				
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	gy challenge facing California is real. Every Californian n			

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County of Tos Angeles Sheriff's Aepartment Headquarters 4700 Ramona Boulebard Monterey Park, California 91754-2169



LEROY D. BACA, SHERIFF

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(661) 948-8466

CITY OF LANGASIER COMMUNITY DEVELOPMEN

November 19, 2002

Brian Ludicke City of Lancaster 44933 Fern Avenue Lancaster, California 93534

Dear Mr. Ludicke:

We have received your Notice of Preparation of a Draft Environmental Impact Report of the North Downtown Neighborhood Revitalization Transit Village Plan, and are happy to provide you with the following information:

Law Enforcement and traffic services to the project area are provided by the Los Angels County Sheriff's Department, Lancaster Station, which is contracted by the City of Lancaster. Lancaster Station is located at 501 West Lancaster Boulevard, which borders the project area. The City contracts for 67 patrol deputies, 35 patrol cars and 4 motorcycles. Based on the January 2001 population of 122,100, the service ratio for Lancaster Station is 0.60 officers/1,000 population.

Response times to the project area would be as follows (approximate): Emergency calls (a crime that is presently occurring and is a life or death situation), 5 minutes or less; Routine calls (a crime that has already occurred and is not a life or death situation), 20 minutes or less. Response times represent the range of time required to handle a call for service, which measured from the time a call is received, until the patrol car arrives at the incident location. Response times vary because calls are handled by the nearest available patrol car located within the patrol area, and not necessarily the station itself.

This project will not have a negative impact on law enforcement services or the Lancaster Sheriff's Station. If anything, it will have a positive impact. Current crime in the project area drains law enforcement resources. Due to the age and condition of most of the properties in the

A Tradition of Service



JAMES A. NOYES, Director

### **COUNTY OF LOS ANGELES**

### DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 www.ladpw.org

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CITY OF LANCASTER COMMUNITY DEVELOPMENT

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

RECEIVED REFER TO FILE: IN REPLY PLEASE WM-4 DEC 1 3 2002

RBF CONSULTING

November 25, 2002

Mr. Brian Ludicke City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534

Dear Mr. Ludicke:

### RESPONSE TO A NOTICE OF PREPARATION NORTH DOWNTOWN NEIGHBOR REVITALIZATION TRANSIT VILLAGE PLAN CITY OF LANCASTER

Thank you for the opportunity to provide comments on the Notice of Preparation for the subject project. The proposed project consists of the development of in-fill affordable housing, redevelopment of commercial retail, and modifications to existing street patterns, which includes construction of a new street and closure of certain streets. In addition, entities are proposing development of a Christian school, construction of a counseling facility for children, expansion of a church/school and related ancillary facilities, construction of a mental health facility, and a new 10-to-12-acre park. We have reviewed the submittal and offer the following comments:

### Environmental Programs

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in the County of Los Angeles in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The construction and demolition activities and postdevelopment operations associated with the planned redevelopment may increase the generation of solid waste, and may negatively impact the solid waste management infrastructure in the County. Therefore, the proposed Environmental Impact Report (EIR) should identify what measures the project proponent will implement to mitigate the impact. Mitigation measures may include, but

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Mr. Brian Ludicke November 25, 2002 Page 2

are not limited to, implementation of waste reduction and recycling programs to divert solid waste, including construction and demolition waste, from landfills.

The Draft Environmental Impact Report (DEIR) needs to fully assess the impact of this plan on the quality of stormwater runoff. The DEIR should reference Order No. 96-054, National Pollutant Discharge Elimination System Permit CAS614001 issued by the California Regional Water Quality Control Board to the County and local agencies. The DEIR should also indicate compliance with all relevant stormwater quality management programs of the Federal, State, County, and local agencies.

If any connections are made to any County storm drains, channels, creeks, or other water bodies, a permit is required from our Construction Division.

Should any future project within the subject developmental plan area include the construction, installation, modification, or removal of underground storage tanks and/or industrial waste control or disposal facilities, our Environmental Programs Division must be contacted for required approvals and operating permits. Connections to the public sewer from industrial waste disposal facilities such as installation, modification or removal of restaurants, dry cleaners, auto repair, fueling facilities, etc., shall be subject to review and approval by Public Works' Industrial Waste Unit.

If you have any questions, please contact Mr. Coby Skye at (626) 458-5163.

### Geotechnical and Materials Engineering

The requested EIR must be submitted for review. The EIR shall address the geotechnical issues identified in the Notice of Preparation/Initial Study.

A description of the project and the associated grading, i.e., existing and proposed grades, etc., must be shown on a topographic map. Also all geotechnical hazards must be identified, and any mitigation measures discussed in detail. The requested information shall be included in the appropriate documents, as requested by others.

If you have any questions, please contact Mr. Amir Alam at (626) 458-4925.

### Land Development (Grading and Drainage)

We have reviewed the subject document and have no comments.

If you have any questions, please contact Mr. Laren T. Bunker at (626) 458-4921.

Mr. Brian Ludicke November 25, 2002 Page 3

### Land Development (Transportation Planning)

We have reviewed the subject document and have no comments.

If you have any questions, please contact Mr. Hubert Seto at (626) 458-4349.

### Traffic and Lighting

When completed, we would like the opportunity to review the DEIR and the traffic impact report for any potential traffic impacts to County roadways and intersections in the unincorporated area. The significant traffic impact criteria contained in the enclosed County of Los Angeles Traffic Impact Analysis Report Guidelines should be used when evaluating roads and intersections within the unincorporated area.

We recommend that the State of California Department of Transportation review the EIR for any impact within its jurisdiction.

If you have any questions, please contact Ms. Anna Marie Gilmore of our Traffic Studies Section at (626) 300-4741.

### Watershed Management (Santa Clara River/Antelope Valley and Dominguez Channel

We have reviewed the subject document and have no comments.

If you have any questions, please contact Mr. Arfan Haidary at (626) 458-4329.

### Watershed Management

The proposed project should include investigation of watershed management opportunities to maximize capture of local rainfall on the project site, eliminate incremental increase in flows to the storm drain system, and provide filtering of flows to capture contaminants originating from the project site. Mr. Brian Ludicke November 25, 2002 Page 4

If you have any questions regarding the above comments or the environmental review process of Public Works, please contact Ms. Massie Munroe at (626) 458-4359.

Very truly yours,

JAMES A. NOYES Director of Public Works 1 lan ROD H. KUBOMOTO

Assistant Deputy Director Watershed Management Division

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Enc.

# Traffic Impact Analysis Report Guidelines



January 1, 1997

Prepared by the County of Los Angeles Department of Public Works

### James A. Noyes Director of Public Works

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T-2/ACCESS2 (01/22/99)

### I. Introduction

The County of Los Angeles Department of Public Works has established the following Guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The purpose of these Guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented and timely review by County staff. It is strongly recommended that the applicant's traffic engineer consult with County staff before beginning the study to establish the scope and basic assumptions of the study and any deviations from these Guidelines to avoid unnecessary delays or revisions. For assistance in the TIA scoping process, the Traffic and Lighting Division, Traffic Studies Unit, can be contacted at (626) 458-5909.

## II. Requirements

Generally, the Department staff is concerned with adverse impacts on traffic if:

- Traffic generated by a project considered alone or cumulatively with other related projects, when added to existing traffic volumes, exceeds certain capacity thresholds of an intersection or roadway, contributes to an unacceptable level of service (LOS), or exacerbates an existing congested condition.
- 2. Project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, and parking facilities).
- 3. Proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways).
- 4. Nonresidential uses generate commuter or truck traffic through a residential area.
- 5. Project generated traffic significantly increases on a residential street and alters its residential character.

A traffic report must be prepared by a registered Civil or Traffic Engineer. A traffic report is generally needed if a project generates over 500 trips per day or where other possible adverse impacts as discussed in the Analysis and Impact Section (see page 4) of these Guidelines are identified. Before a full review is conducted, the County staff will check the completeness of the TIA report using the attached check list (Exhibit A). If the report is missing any of the check list items, it will be returned for revision.

III. TIA Report Contents

### A. Project Description

The following information is required:

- A description of the project, including those factors which quantify traffic generators, e.g., dwelling units, square feet of office space, persons to be employed, restaurant seats, acres of raw land, etc. For residential developments, the description should indicate the type of residence, (e.g., one level or townhouse condominiums, and if its use is for families, adults or retirees).
- 2. A plot plan showing proposed driveways, streets, internal circulation, and any new parking facilities on the project site.
  - Ti konstrato kutorajak
- A vicinity map showing the site location and the study area relative toother transportation systems.
- 4... A brief history of the projects that are part of the phased Master Plan or a parent tract/parcel map.

### B. Transportation Circulation Setting

The following information is required:

### 1. Existing and Proposed Site Uses

A description of the permitted and/or proposed uses of the project site in terms of the various zoning and land use categories of the County, and the status and the usage of any facilities currently existing on the site.

### 2. Existing and Proposed Roadways and Intersections

A description of existing streets and roadways, both within the project site (if any) and in the surrounding area. Include information on the roadway classifications (per the Highway Plan), the number of lanes and roadway widths, signalized intersections, separate turn lanes, and the signal phases for turning movements.

Existing daily directional and peak-hour through and turning traffic volumes on the roadways surrounding and/or logically associated with the project site, including Secondary and Major highways and freeways. Local streets affected by the project should also be shown. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over one year old.' Since peak volumes vary considerably, a ten percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

All assumed roadways and intersections or any other transportation circulation improvements must be identified and discussed. The discussion should include the scope and the status of the assumed improvements including the construction schedule and financing plan. It should be noted that all assumed roadways and intersections or any other transportation circulation improvements will be made a condition of approval for the project to be in place prior to the issuance of building permits. If assumed improvements do not get built on time due to an unforeseeable condition, traffic conditions for a different assumed highway network or other mitigation measures will be considered if a traffic study is submitted with a different assumed network or other measures are recommended to mitigate the traffic impact in question.

### C. Analysis and Impact

The following information is required:

1. Trip Generation Analysis

Tabulate the estimated number of daily trips and a.m. and p.m. peak-hour trips generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. The trip generation rates contained in the latest edition of the Institute of Transportation Engineers Trip Generation manual should generally be used, except in the case of condominiums/townhomes when the following rates should be used per unit:

A.M.-PeakP.M.-PeakADTOutgoing/IncomingOutgoing/IncomingCondominiums/<br/>Townhomes8.00.48/0.060.26/0.47

There may be a trip reduction due to internal and/or pass-by trips. Internal trip reduction can only be applied for mixed-use types of developments and pass-by trip reduction for retail/commercial types of developments. Internal or pass-by trip reduction assumptions will require analytical support based on verifiable actual similar developments to demonstrate how the figures were derived and will require approval by the County.

### 2. Trip Distribution

C. WORTH COMPLETE COMPLETE OF THE

Diagrams showing the percentages and volumes of the project and nearby project's a.m. and p.m. peak-hour trips logically distributed on the roadway system must be provided. The Regional Daily Trip Distribution Factors (Exhibit D-3) contained in the Congestion Management Program (CMP) Land Use Analysis Guidelines shall be referenced for regional trip distribution assumptions. If it is assumed that new routes will alter traffic patterns, adequate backup including traffic distribution maps must be provided showing how and why these routes will alter traffic patterns.

The study area should include arterial highways, freeways, and intersections generally within a one-mile radius of the project site.

Note: This distance may be greater than one-mile for rural areas depending on the proximity to nearby signalized intersections and the availability of master plan access routes.

#### 3. <u>Related Projects List</u>

A list of related projects that are approximately within a one-and-a-half mile radius of the project site and would reasonably be expected to be in place by the project's build out year must be included in the report. Related projects shall include all pending, approved, recorded, or constructed projects that are not occupied at the time of the existing traffic counts.

> The County of Los Angeles Department of Regional Planning (DRP) and other public agencies (if necessary) should be contacted to obtain the latest listings. A table and a map showing the status, project/zone change/conditional use permit/parcel map/tract number, and the location of each project must be provided. For a computer printout of the listing of all filed projects within the County, Land Development Management Section of the DRP, at (213) 974-6481 can be contacted.

### 4. LOS Analysis

If it appears that the project's generated traffic alone or together with other projects in the area could worsen the LOS of an intersection or roadway, a "before" and "after" LOS analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis are two methods often used to assess existing and future LOS at intersections.

If the ICU planning method is used, a maximum of 1,600 vehicles per hour per lane should be used (2,880 vehicles per hour should be used for dual left-tum lanes) and a ten percent yellow clearance cycle should be included. Intersection LOS analysis and calculation work sheets, as well as diagrams showing turning volumes shall be included in the report for the following traffic conditions.

- (a) ... Existing traffic;
- (b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
- (c) Traffic in (b) plus project traffic;
- (d) Traffic in (c) with the proposed mitigation measures (if necessary);
- (e) Traffic in (c) plus the cumulative traffic of other known developments; and
  - (f) Traffic in (e) with the proposed mitigation measures (if necessary).

The project's impact on two-lane roadways should also be analyzed for all of the above traffic conditions if those two-lane roadways are used for access. LOS service analysis contained in the Highway Capacity Analysis, Chapter 8, Two-Lane Highways, should be used to evaluate the project's impact. For simplified analysis, use the established significant impact thresholds for two-lane roadways as shown on page 7.

• • • • •

### 5. Significant Impact Threshold

For intersections, the impact is considered significant if the project related increase in the volume to capacity (v/c) ratio equals or exceeds the threshold shown below.

, INTERSECTIONS						
- Preproject						
		Project /C Increase				
LOS	V/C					
С.	0.71 to 0.80	.0.04 or more				
D	0.81 to 0.90	0.02 or more				
E/F	0.91 or more	0.01 or more				

The project is deemed to have a significant impact on two-lane froadways when it adds the following percentages based on LOS of the preproject conditions.

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		1.1.0			

TWO-LANE ROADWAYS						
		Percentages Increase in Passenger Car Per Hour (PCPH) by Project				
		Ρ	reproject LOS			
Directional Split	Total Capacity - (PCPH)	C	D.	E/F		
50/50	2,800	4	2	1		
.60/40	2,650	4	2	1		
70/30	2,500	. 4	2	1		
<u>8</u> 0/20	2,300	4	2	1 -		
90/10	2,100	4	2	1		
100/0	2,000	4 .	2	1.		

### 6. Analysis Discussion

Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative traffic impact of this and other projects require mitigation measures, such as traffic signals, then estimate the percent share using the project percent share formula given in the Section III D of the TIA Guidelines. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region. Also, for all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any).

Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening to provide left-turn and right-turn lanes at access points into the proposed project; (3) the impact of increased traffic volumes on local residential streets; and (4) the need for road realignment to improve sight distance.

Projects which propose to amend the County's General Plan Land Use and substantially increase potential traffic generation must provide an analysis of the project at current planned land use versus proposed land use in the build out condition for the project area. The purpose of such analysis is to provide decision makers with the understanding of the planned circulation network's ability to accommodate additional traffic generation caused by the proposed General Plan Land Use amendments.

D. Traffic Models and Model Generated TIA's

Computerized traffic models are planning tools used to develop future traffic projections based on development growth patterns. The Department currently operates two traffic models, one for the Santa Clarita Valley and another for the Ventura Corridor area. The Department can test proposed development project traffic impacts for the public in these areas for a fee. For assistance in the traffic modeling, the Planning Division, Transportation Planning/Assessments Section, can be contacted at (626) 458-4351.

For TIA's prepared using data from outside traffic modeling, the following information is required:

- 1. The type of modeling software used to generate the traffic analysis report data (i.e., TRANPLAN, EMME/2, etc.).
- The list of land use assumptions by traffic analysis zones (TAZ's) and their sources used in the traffic model in lieu of a related projects list.

3. A copy of the computerized roadway network assumed to be in place at the time of the project. Streets should be color-coded by street type. Also, TAZ's and their corresponding centroidal connectors, as well as number of lanes should be displayed.

 The list of trip generation rates used in the traffic model and their sources.

Model runs (plots) identifying both the with and without project scenarios. The volumes displayed on the plots should be in 100's for Average Daily Vehicle Trips (ADT) and 10's for peak-hour plots.

### E. Traffic Signals

The following information is required:

Traffic signal warrant analysis using the State of California Department of Transportation (Caltrans) Peak-Hour (Figures 9-8 and 9-9 of-Caltrans Traffic Manual) and Estimated Average Daily (Figure 9-4 of Caltrans Traffic Manual) Traffic Warrant Analysis should be provided. If the installation of signals is warranted with the addition of the project's traffic, then the installation will be the sole responsibility of the project. If it is warranted with cumulative traffic of the project and other related projects, the following formula should be used to calculate the project percent share.

Project Percentage Share = \_\_\_\_\_

Project Traffic Project+Other Related Projects Traffic

> The project percent share should be based on the peak-hour volumes that warrant signals. If both peak hours satisfy the installation of signals, the average of the two peak-hour volumes should be used in the percent share analysis.

### F. Mitigation Measures

The following information is required.

Identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance. Also, identify those mitigation measures which will be implemented by others. Those mitigation measures that are assumed to be implemented by others will be made a condition of approval for the project to be in place prior to issuance of building permits. Mitigation measures may include, but are not limited to, the following:

### 1. Traffic Engineering Techniques.

a. Locate access points to optimize visibility and principal structure potential conflict.

- b. Design parking facilities to avoid queuing into public streets during peak arrival periods.
- c. Provide additional off-street parking.

d. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.

- e.--Signalize or modify traffic signals at intersections.

- f. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
- g. Widen the pavement to provide left- or right-turn
- lanes to lessen the interference with the traffic flow.<sup>1</sup>

h. Widen intersection approaches to provide additional capacity.

- I. Prohibit left turns to and from the proposed development.
- j. Restrict on-street parking during peak hours to increase street capacity.<sup>1</sup>

2. <u>Contribute to a benefit district to fund major capital</u> <u>improvements</u>

Physical roadway improvements to improve capacity should be considered before considering parking restrictions.

- a. Construct a grade separation.
- b. Improve or construct alternate routes.
- c. Complete proposed routes shown on the Los Angeles Highway Plan.
- d. Improve freeway interchanges (bridge, widening, modifications, and etc.).
- Transportation 3. System Management (TSM) Techniques<sup>2</sup>

Establish flexible working hours.

- b. Encourage employee use of carpools and public transportation (specific measures must be indicated).
- c. Establish preferential parking for carpools.
- d. Restrict truck deliveries to Major and Secondary highways and encourage deliveries during the off-peak hours.
- e. Establish a monitoring program to ensure that project traffic volumes do not exceed projected traffic demand.

Note: When it appears that other jurisdictions will be impacted by a development, the Department will request that the involved jurisdiction also review the TIA. A written response from that jurisdiction should be provided with appropriate follow-up to the lead County agency.

#### **CMP** Guidelines G.

The following information is required:

Where the project meets the criteria established in the County of Los Angeles' CMP Land Use Analysis Guidelines, a CMP analysis must be provided. A copy of the latest Guidelines will be available upon request. A CMP TIA is required for all projects required to prepare an Environmental Assessment based on local determination or projects requiring a traffic study.

2 Contributions to a benefit district and/or TSM techniques may not be used to lower LOS in the capacity calculations.

JHC:ce T-2/ACCESS

Attach.

The geographic area examined in the TIA must include the following, at a minimum.

All CMP arterial monitoring intersections (see Exhibit B of the Guidelines), including freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours.

 Main line freeway monitoring locations (see Exhibit C of the Guidelines) where the project will add 150 or more trips, in either direction, during the a.m. or p.m. weekday peak hours.

 Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system.

If, based on these criteria, the TIA identifies no facilities for study, no further traffic analysis is required.



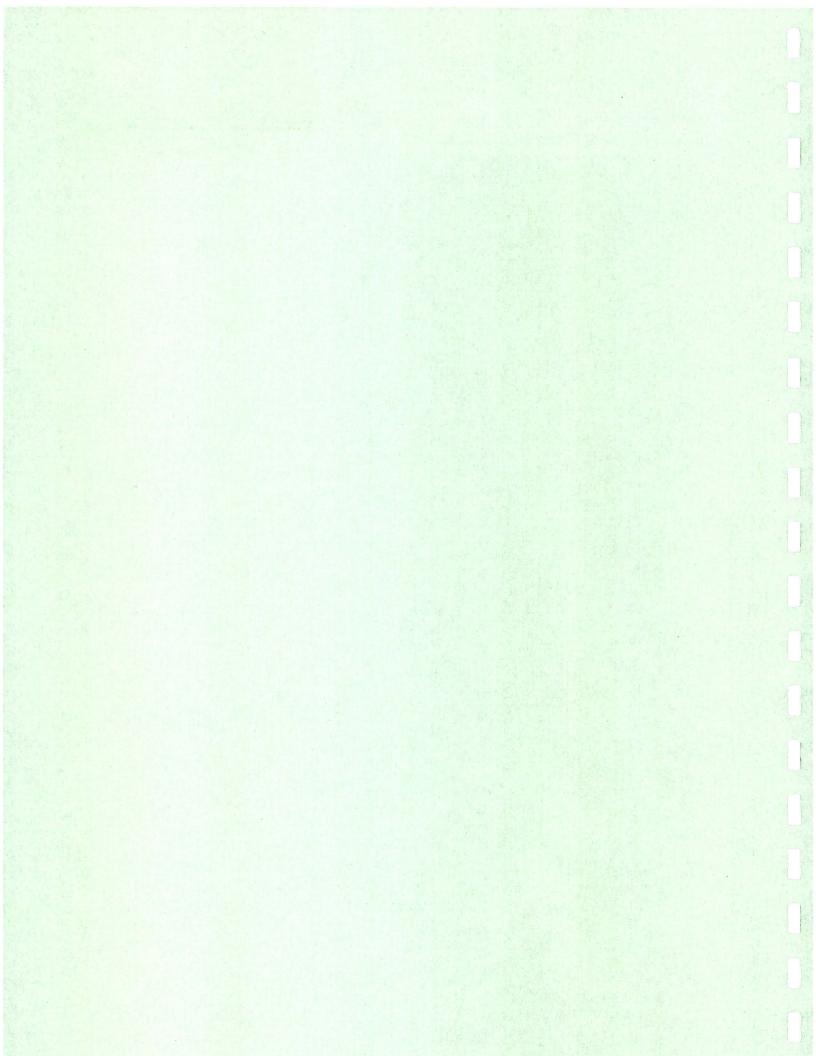
### EXHIBIT A TRAFFIC IMPACT ANALYSIS REPORT CONTENTS CHECK LIST

Note: Before a full review is conducted, PW's staff will check the completeness of the Traffic Impact Analysis Report. If the Report is missing any of the items listed below, it will be returned for revision.

CONTENT	YES/ NO	COMMENT
Site Plan • Access locations • Interior circulation		
<ul> <li>Trip Generation Rates</li> <li>Institute of Transportation Engineers (ITE) trip generation rates</li> <li>Documentation for alternate rates</li> </ul>		
Trip Distribution         • Regional         • Local project (am/pm)         • Local related projects(am/pm)	-	· · · · · ·
Traffic Counts <ul> <li>Taken within one year</li> <li>Date/Time</li> </ul>	· .	
<ul> <li>Discounting</li> <li>Internal trip discounts for mixed use developments</li> <li>Pass-by trip discounts for commercial/retail developments</li> <li>Backup</li> </ul>		
<ul> <li>Level of Service Calculations</li> <li>Intersection Capacity Utilization (ICU) or Criteria Movement Analysis</li> <li>10 percent yellow clearance for ICU planning method</li> <li>1,600 vehicles per lane (vpl); 2,880 vpl for dual left-turn lanes for ICU planning method</li> <li>Calculation sheets</li> <li>Scenarios as required per Guidelines</li> <li>Existing/Future lane configurations</li> </ul>		· · · · · · · · · · · · · · · · · · ·
<ul> <li>Signal Warrant Analysis</li> <li>Peak-hour/Average Daily Traffic per the State of California Department of Transportation standards</li> </ul>		
Mitigation Measures <ul> <li>Project impacts</li> <li>Cumulative developments impacts</li> <li>Projects percent share of the cost to mitigate cumulative development impacts</li> </ul>		· · · · · · · · · · · · · · · · · · ·
Congestion Management Program Analysis		

JHC:ce T-2/ACCESS3 02/22/99 

### **15.3 Traffic Impact Study**



### NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION/TRANSIT VILLAGE PLAN TRAFFIC IMPACT STUDY



Prepared by



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#### March 5, 2003

JN 10-102041

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#### EXECUTIVE SUMMARY

This study analyzes the forecast traffic impacts associated with the proposed North Downtown Neighborhood Revitalization/Transit Village Plan (NRTVP) project in the City of Lancaster. The NRTVP project consists of a mix of residential, commercial, and institutional (educational and religious) uses. The project area comprises approximately 100 acres within an area generally bounded by Avenue I to the north, Lancaster Boulevard to the south, Sierra Highway to the east, and 10<sup>th</sup> Street West to the west. Existing project area land uses includes residential, commercial, industrial and institutional uses.

One study intersection is currently operating at a deficient LOS (LOS E or worse) according to City of Lancaster performance criteria:

Fig Avenue/Lancaster Boulevard (p.m. peak hour only).

Based on existing traffic volumes, the Fig Avenue/Lancaster Boulevard intersection satisfies the *Caltrans Peak Hour Volume* signal warrant.

To eliminate the existing conditions deficiency at the Fig Avenue/Lancaster Boulevard intersection, the following improvement is recommended:

• Fig Avenue/Lancaster Boulevard - Signalize intersection.

Assuming implementation of the recommended improvement, the Fig Avenue/Lancaster Boulevard intersection is forecast to operate at an acceptable LOS (LOS D or better) during the a.m. and p.m. peak hour under existing conditions.

Two study intersections are forecast to operate at a deficient LOS (LOS E or worse) for forecast year 2010 without project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only);
- Elm Avenue/Avenue I (p.m. peak hour only).

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether forecast year 2010 without project traffic volumes at the deficiently operating intersections warrant signalization.

Neither the *Minimum Vehicular Traffic Signal Warrant* nor the *Interruption of Continuous Traffic Signal Warrant* are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 without project conditions.

The *Minimum Vehicular Signal Warrant* is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 without project conditions.

Since the project area is occupied by various land uses which are currently generating trips, the actual forecast project area trip generation consists of the trips forecast to be generated by the proposed project minus the existing trips generated by existing land uses currently that are removed by the proposed project.

Existing study area uses that will be removed by the proposed project are currently generating approximately 3,823 daily trips, which includes approximately 209 a.m. peak hour trips and approximately 363 p.m. peak hour trips. The proposed project is forecast to generate a net change of approximately 5,451 new daily trips, which includes approximately 1,052 new a.m. peak hour trips and approximately 783 new p.m. peak hour trips.

With the addition of project-generated trips, the following two study intersections are forecast to continue operating at a deficient LOS (LOS E or worse) for forecast year 2010 with project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only); and
- Elm Avenue/Avenue I (p.m. peak hour only).

The addition of project-generated trips to the study intersections does not cause any of the study intersections to change from LOS D to LOS E or LOS F; therefore, based on City of Lancaster established thresholds of significance, the proposed project does not cause any significant traffic impacts to occur.

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether forecast year 2010 with project traffic volumes at the deficiently operating intersection warrant signalization.

Neither the *Minimum Vehicular Traffic Signal Warrant* nor the *Interruption of Continuous Traffic Signal Warrant* are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 with project conditions.

The *Minimum Vehicular Signal Warrant* is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 with project conditions.

The addition of project-generated trips at the CMP study segments does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

The addition of project-generated trips at the CMP study intersections does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

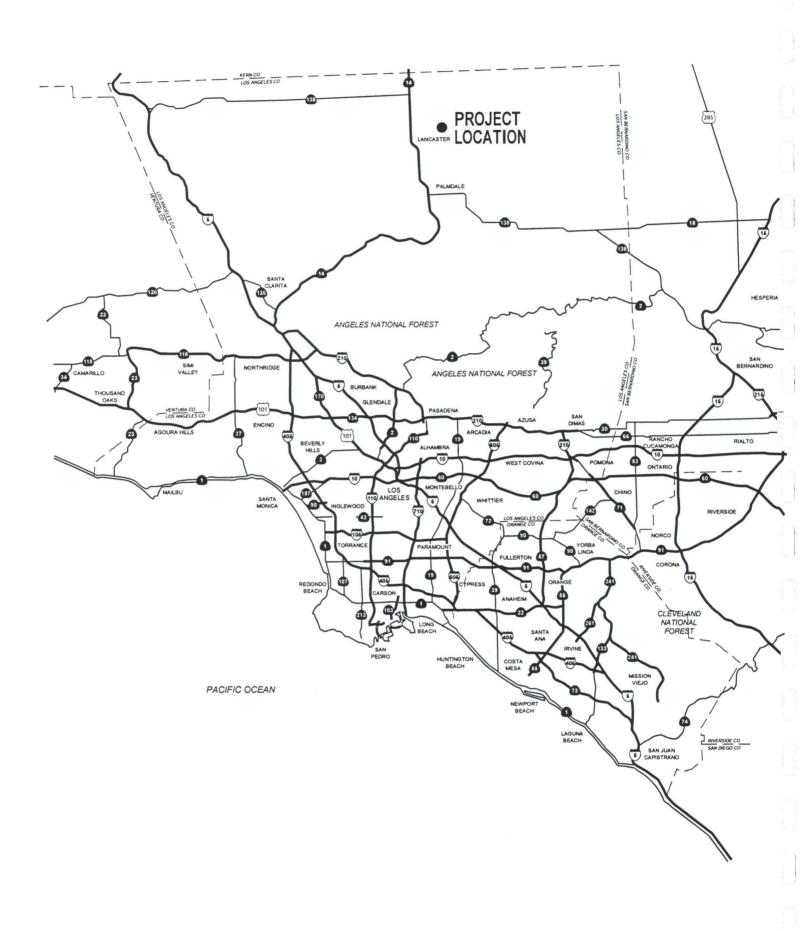
#### INTRODUCTION

This study analyzes the forecast traffic impacts associated with the proposed North Downtown Neighborhood Revitalization/Transit Village Plan (NRTVP) project in the City of Lancaster. The NRTVP project consists of a mix of residential, commercial, and institutional (educational and religious) uses. The project area comprises approximately 100 acres within an area generally bounded by Avenue I to the north, Lancaster Boulevard to the south, Sierra Highway to the east, and 10<sup>th</sup> Street West to the west. Existing project area land uses includes residential, commercial, industrial and institutional uses. Exhibit 1 shows the regional project location. Exhibit 2 shows the location of the project area.

#### Study Area

The City of Lancaster identified the following thirty-six intersections for analysis in this study:

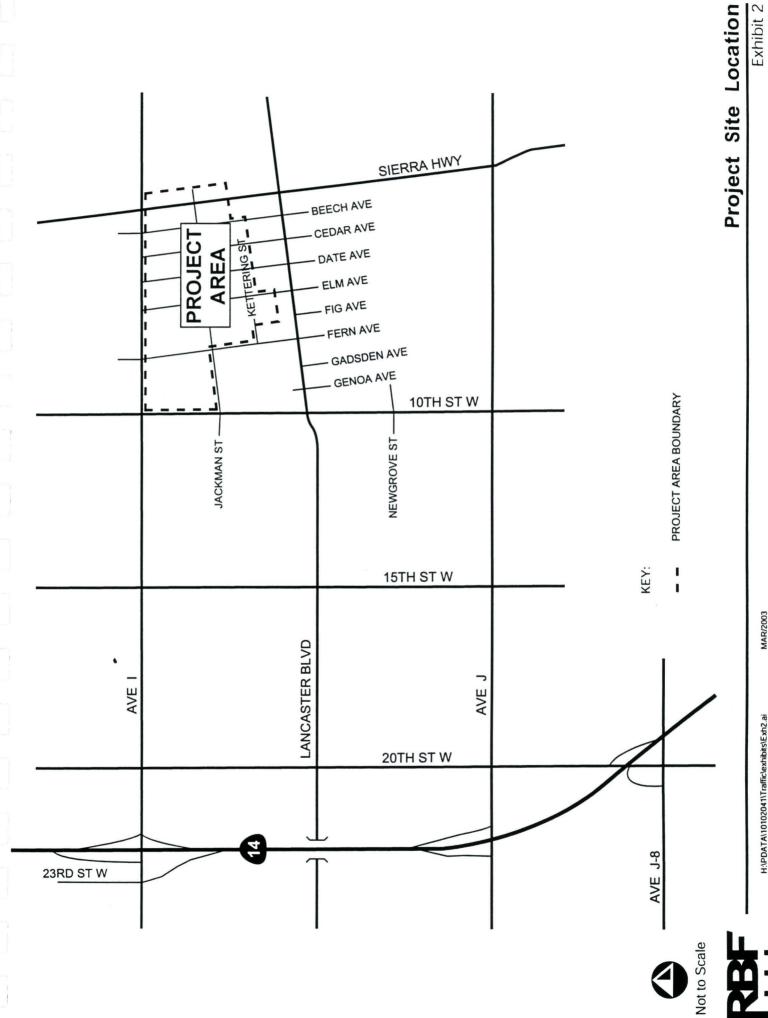
- SR-14 SB On-ramp-23<sup>rd</sup> St W/Ave I (signalized);
- SR-14 SB Off-ramp/Ave I (signalized);
- SR-14 NB Ramps/Ave I (signalized);
- SR-14 SB Off-ramp/Ave J (signalized);
- 20<sup>th</sup> St W/Ave I (signalized);
- 20<sup>th</sup> St W/Lancaster Blvd (signalized);
- 20th St W/Ave J (signalized);
- SR-14 NB Off-ramp/20<sup>th</sup> St W (signalized);
- 20<sup>th</sup> St W/Ave J-8 (signalized);
- 15<sup>th</sup> St W/Ave I (signalized);
- 15<sup>th</sup> St W/Lancaster Blvd (signalized);
- 15<sup>th</sup> St W/Ave J (signalized);
- 10<sup>th</sup> St W/Ave I (signalized);
- 10<sup>th</sup> St W/Jackman St (signalized);
- 10th St W/Lancaster Blvd (signalized);
- 10<sup>th</sup> St W/Newgrove St (signalized);
- 10<sup>th</sup> St W/Ave J (signalized);
- Genoa Ave/Lancaster Blvd (two-way stop-controlled);
- Gadsden Ave/Lancaster Blvd (signalized);
- Fern Ave/Ave I (signalized);
- Fern Ave/Jackman St (four-way stop-controlled);
- Fern Ave/Kettering St (one-way stop-controlled);
- Fern Ave/Lancaster Blvd (signalized);
- Fig Ave/Lancaster Blvd (one-way stop-controlled);
- Elm Ave/Ave I (one-way stop-controlled);
- Elm Ave/Jackman St (four-way stop-controlled);
- Elm Ave/Lancaster Blvd (signalized);
- Date Ave/Lancaster Blvd (signalized);
- Cedar Ave/Lancaster Blvd (signalized);
- Beech Ave/Lancaster Blvd (signalized);
- Sierra Hwy/Ave I (signalized);





### **Regional Project Location**

Exhibit



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- Sierra Hwy/Jackman St (two-way stop-controlled);
- Sierra Hwy/Lancaster Blvd (signalized); and
- Sierra Hwy/Ave J (signalized).

Exhibit 3 shows the location of the study intersections, which are analyzed for the following study scenarios:

- Existing Conditions;
- Forecast Year 2010 Without Project Conditions; and
- Forecast Year 2010 With Project Conditions.

For the purposes of this analysis, the study area is divided into two areas for illustration of peak hour intersection volumes and intersection geometry as shown in Exhibit 3.

#### Analysis Methodology

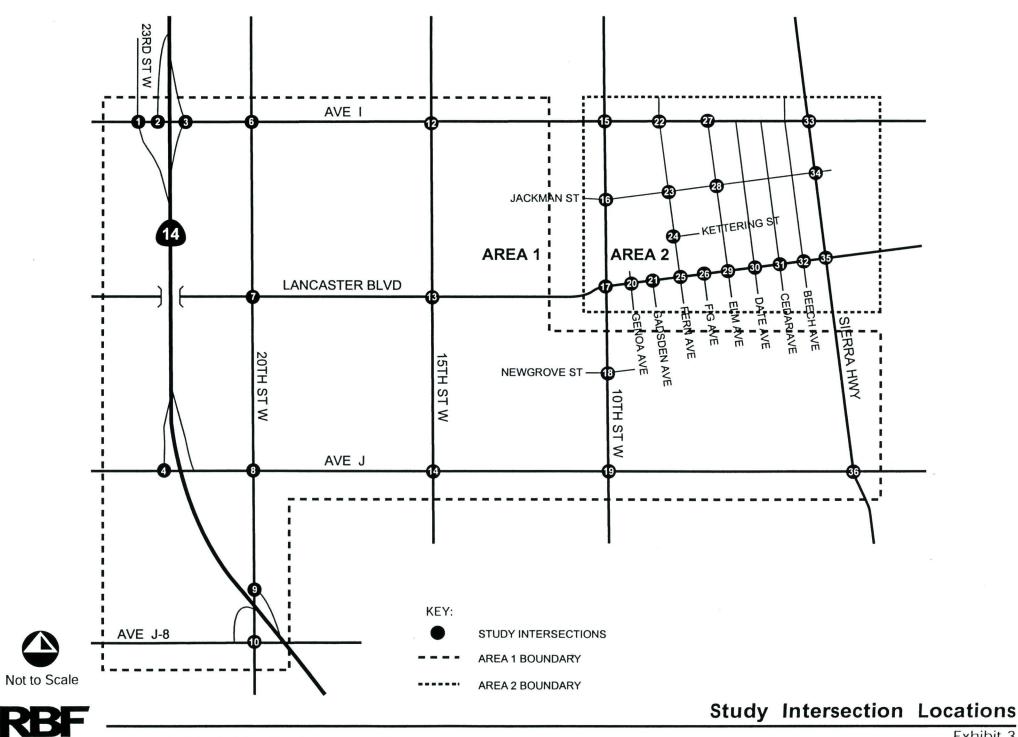
Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The *Intersection Capacity Utilization (ICU)* analysis method is utilized in this study to determine the operating LOS of the signalized study intersections.

The ICU analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on corresponding Volume/Capacity (V/C) ratios shown in Table 1.

Signalizeu li	itersections
V/C Ratio	LOS
≤ 0.60	А
0.61 - 0.70	В
0.71 - 0.80	С
0.81 - 0.90	D
0.91 - 1.00	E
> 1.00	F

Table 1
V/C & LOS Ranges
Signalized Intersections

The 2000 Highway Capacity Manual (HCM) Operational Analysis Methodology is used to evaluate the operation of unsignalized study intersections, where the LOS of study intersections is based on the delay experienced per vehicle. The LOS delay ranges for unsignalized intersections are summarized in Table 2.



U	nsignalized Intersections
Level	Unsignalized Intersections
of Service	Average Total Delay Per Vehicle (Seconds)
A	0 - 10.0
В	10.01 - 15.0
С	15.01 - 25.0
D	25.01 - 35.0
E	35.01 - 50.0
F	50.01 & up

Table 2 LOS & Delay Ranges Unsignalized Intersections

Source: 2000 Highway Capacity Manual

The City of Lancaster target for peak hour intersection operation is LOS D or better.

#### **Thresholds of Significance**

To determine whether the addition of project-generated trips results in a significant impact at a study intersection, and thus requires mitigation, the City of Lancaster utilizes the following threshold of significance:

 A significant project impact occurs at an intersection when addition of projectgenerated trips cause the intersection LOS to change from LOS D to LOS E or LOS F.

#### **EXISTING CONDITIONS**

The characteristics of the roadway system in the vicinity of the project area are described below:

**State Route 14 (SR-14)** provides regional access to the project site as a six-lane freeway facility. There are three interchanges along SR-14 that are within the study area.

**23<sup>rd</sup> Street West** is a two-lane undivided roadway, oriented in a north-south direction, with on-street parking. 23<sup>rd</sup> Street West is aligned with the SR-14 SB On-ramp.

20th Street West is a four- to six-lane roadway, oriented in the north-south direction.

15<sup>th</sup> Street West is a two- to four-lane roadway, oriented in the north-south direction.

10<sup>th</sup> Street West is a four- to six-lane roadway, oriented in the north-south direction.

**Sierra Highway** is a four- to six-lane divided roadway, oriented in the north-south direction. Sierra Highway parallels the Union Pacific Railroad.

**Avenue I** is a four- to six-lane roadway, oriented in the east-west direction. Avenue I defines the northern boundary of the project area.

**Lancaster Boulevard** is a four-lane roadway, oriented in the east-west direction. Lancaster Boulevard defines the southern boundary of the project area.

Avenue J is a four- to six-lane roadway, oriented in the east-west direction.

**Avenue J-8** is a four-lane divided roadway, with a continuous left-turn lane, oriented in the east-west direction.

**Genoa Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Genoa Avenue.

**Gadsden Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Gadsden Avenue.

**Fern Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Fern Avenue.

**Fig Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Fig Avenue.

**Elm Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Elm Avenue.

**Date Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Date Avenue.

**Cedar Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Cedar Avenue.

**Beech Avenue** is a two-lane undivided roadway, oriented in a north-south direction. On-street parking is provided on both sides of Beech Avenue.

**Jackman Street** is a two-lane undivided roadway, oriented in a east-west direction. On-street parking is provided on both sides of Jackman Street.

**Kettering Street** is a two-lane undivided roadway, oriented in a east-west direction. On-street parking is provided on both sides of Kettering Street.

**Newgrove Street** is a two-lane undivided roadway, oriented in a east-west direction. On-street parking is provided on both sides of Newgrove Street.

#### Existing Conditions Peak Hour LOS

To determine the existing operation of the study intersections, existing intersection counts were taken in the a.m. and p.m. peak hour periods in September 2002 (when local schools were in session). At the time existing counts were taken several residential uses within the project area had recently been removed; therefore existing traffic volumes were adjusted to account for trips generated by those uses, as directed by City-staff.

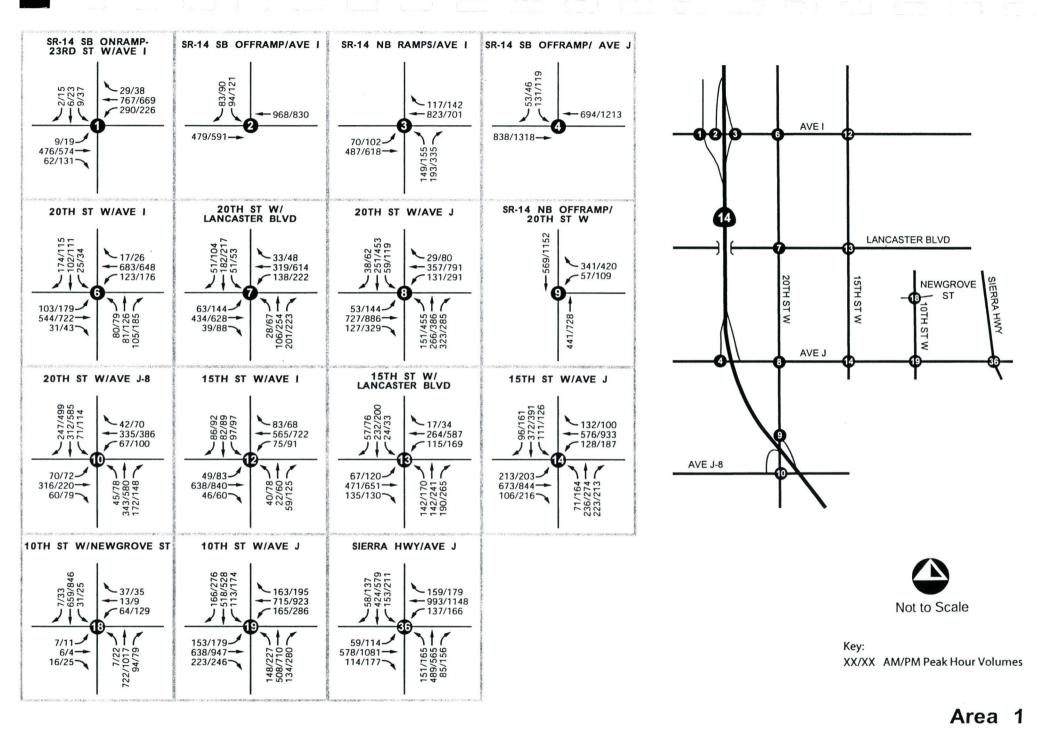
Exhibits 4 and 5 show existing a.m. and p.m. peak hour volumes at the study intersections; detailed peak hour count data is included in Appendix A. Exhibits 6 and 7 show the existing conditions study intersection geometries.

Table 3 summarizes the existing a.m. and p.m. peak hour LOS of the study intersections; detailed LOS analysis sheets are provided in Appendix B.

	Existing	Peak Hou	r LOS			
Study Internetion	V/C		Delay		LOS	
Study Intersection	АМ	РМ	AM	РМ	AM	РМ
SR-14 SB On-ramp-23rd St W/Ave I	0.44	0.44	N/A	N/A	А	А
SR-14 SB Off-ramp/Ave I	0.46	0.44	N/A	N/A	A	А
SR-14 NB Ramps/Ave I	0.52	0.59	N/A	N/A	А	A
SR-14 SB Off-ramp/Ave J	0.36	0.45	N/A	N/A	А	А
20 <sup>th</sup> St W/Ave I	0.47	0.50	N/A	N/A	А	А
20th St W/Lancaster Blvd	0.41	0.57	N/A	N/A	A	A
20 <sup>th</sup> St W/Ave J	0.60	0.82	N/A	N/A	A	D
SR-14 NB Off-ramp/20th St W	0.45	0.60	N/A	N/A	A	А
20 <sup>th</sup> St W/Ave J-8	0.44	0.65	N/A	N/A	A	В
15 <sup>th</sup> St W/Ave I	0.39	0.48	N/A	N/A	А	А
15 <sup>th</sup> St W/Lancaster Blvd	0.54	0.64	N/A	N/A	А	В
15 <sup>th</sup> St W/Ave J	0.67	0.83	N/A	N/A	В	D
10 <sup>th</sup> St W/Ave I	0.57	0.75	N/A	N/A	А	С
10 <sup>th</sup> St W/Jackman St	0.34	0.45	N/A	N/A	A	А
10th St W/Lancaster Blvd	0.53	0.70	N/A	N/A	А	В

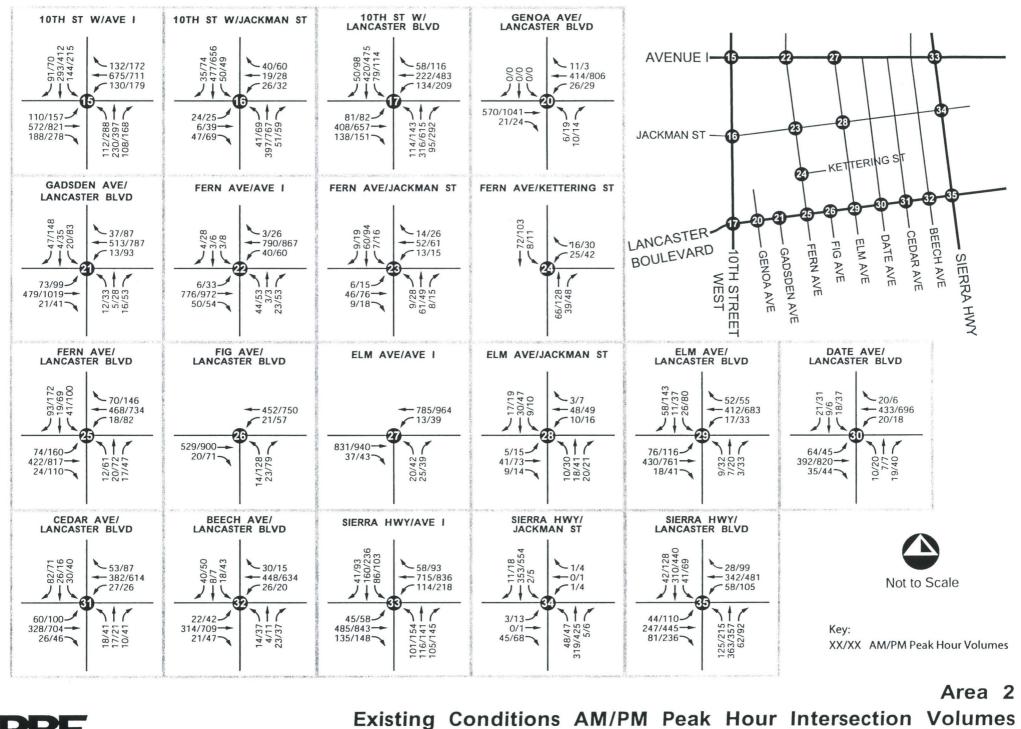
Table 3 Existing Peak Hour LOS

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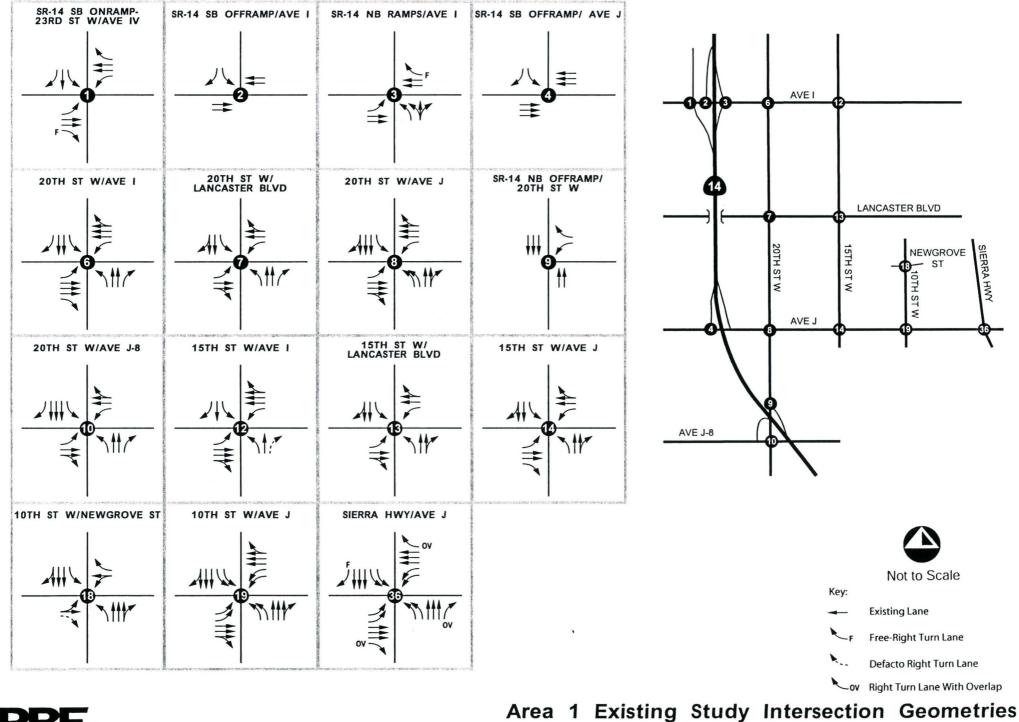


**Existing Conditions AM/PM Peak Hour Intersection Volumes** 

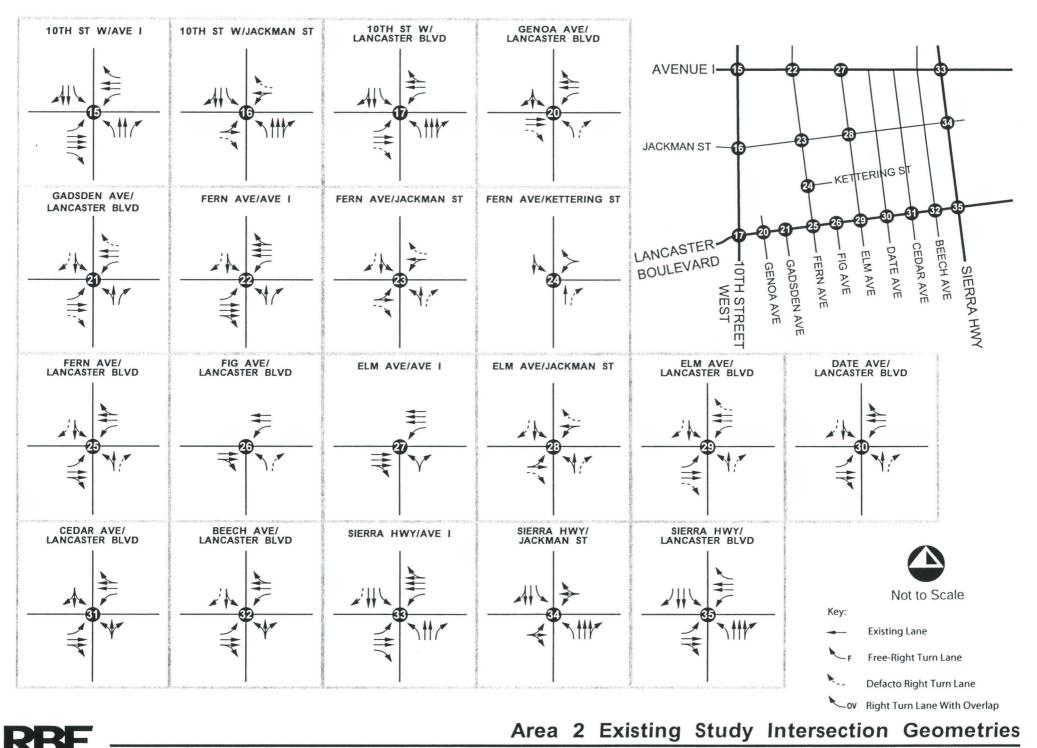


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Exhibit 5



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#### Exhibit 7

10th St W/Newgrove St	0.35	0.45	N/A	N/A	A	A
10 <sup>th</sup> St W/Ave J	0.52	0.70	N/A	N/A	A	В
Genoa Ave/Lancaster Blvd	N/A	N/A	12.7	30.6	В	D
Gadsden Ave/Lancaster Blvd	0.35	0.61	N/A	N/A	А	В
Fern Ave/Ave I	0.33	0.40	N/A	N/A	A	A
Fern Ave/Jackman St	N/A	N/A	8.0	8.5	A	A
Fern Ave/Kettering St	N/A	N/A	9.2	9.9	A	A
Fern Ave/Lancaster Blvd	0.39	0.66	N/A	N/A	A	В
Fig Ave/Lancaster Blvd	N/A	N/A	12.6	108.4	В	F
Elm Ave/Ave I	N/A	N/A	17.7	30.5	с	D
Elm Ave/Jackman St	N/A	N/A	7.7	8.2	A	A
Elm Ave/Lancaster Blvd	0.32	0.51	N/A	N/A	A	A
Date Ave/Lancaster Blvd	0.31	0.43	N/A	N/A	A	A
Cedar Ave/Lancaster Blvd	0.39	0.53	N/A	N/A	A	A
Beech Ave/Lancaster Blvd	0.31	0.43	N/A	N/A	А	А
Sierra Hwy/Ave I	0.44	0.67	N/A	N/A	A	В
Sierra Hwy/Jackman St	N/A	N/A	12.0	15.7	В	с
Sierra Hwy/Lancaster Blvd	0.41	0.65	N/A	N/A	A	В
Sierra Hwy/Ave J	0.48	0.56	N/A	N/A	А	A

Note: N/A = Not Applicable. Deficient intersection operation shown in bold.

As shown in Table 3, one study intersection is currently operating at a deficient LOS (LOS E or worse) according to City of Lancaster performance criteria:

• Fig Avenue/Lancaster Boulevard (p.m. peak hour only).

#### **Existing Conditions Signal Warrant Analysis**

A signal warrant analysis was prepared for the Fig Avenue/Lancaster Boulevard intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether existing traffic volumes at the deficiently operating intersection warrant signalization.

#### Four Hour Volume Signal Warrant

Exhibit 8 shows the *Caltrans Four Hour Volume* signal warrant curve and the plotted points corresponding to the four highest existing traffic volume hours. Only two of the four points lay above the two or more lanes (major) & one or more lanes (minor) curve; therefore, the *Caltrans Four Hour Volume* signal warrant is not satisfied for the Fig Avenue/Lancaster Boulevard intersection based on existing traffic volumes.

#### Peak Hour Volume Signal Warrant

Exhibit 9 shows the *Caltrans Peak Hour Volume* signal warrant curve and the plotted points corresponding to the four highest existing traffic volume hours. Two of the four points lay above the two or more lanes (major) & one or more lanes (minor) curve; therefore, the *Caltrans Peak Hour Volume* signal warrant is satisfied for the Fig Avenue/Lancaster Boulevard intersection based on existing traffic volumes.

Detailed Caltrans traffic signal warrant calculation sheets are contained in Appendix C.

#### **Existing Conditions Recommended Improvements**

To eliminate the existing conditions deficiency at the Fig Avenue/Lancaster Boulevard intersection, the following improvement is recommended:

#### • Fig Avenue/Lancaster Boulevard - Signalize intersection.

Assuming the recommended improvement at the intersection, Table 4 shows the improved LOS of the Fig Avenue/Lancaster Boulevard intersection under existing conditions; detailed LOS analysis sheets are provided in Appendix B.

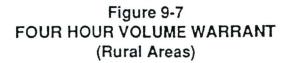
Study Intersection	V/C		Delay		LOS	
	AM	PM	AM	РМ	AM	PM
Fig Ave/Lancaster Blvd	0.30	0.52	N/A	N/A	А	A

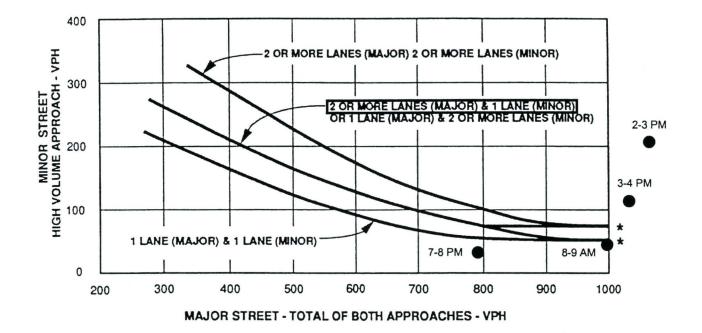
Table 4 Improved Existing Conditions Peak Hour LOS

Note: N/A = Not Applicable.

As shown in Table 4, assuming implementation of the recommended improvement, the Fig Avenue/Lancaster Boulevard intersection is forecast to operate at an acceptable LOS (LOS D or better) during the a.m. and p.m. peak hour under existing conditions.

Traffic Manual





\* NOTE:

80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

SOURCE: CALTRANS TRAFFIC MANUAL



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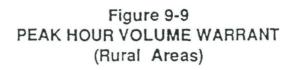
Existing Conditions Four Hour Volume Warrant Fig Ave/Lancaster Blvd

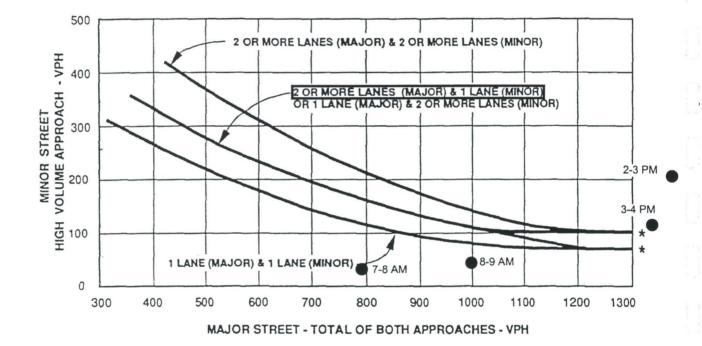
9-13

7-1996

Exhibit 8

#### TRAFFIC SIGNALS AND LIGHTING





\* NOTE:

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

SOURCE: CALTRANS TRAFFIC MANUAL



Existing Conditions Peak Hour Volume Warrar Fig Ave/Lancaster Blvd

Exhibit

1

9-15

7-1996

#### FORECAST YEAR 2010 WITHOUT PROJECT CONDITIONS

Forecast year 2010 traffic volumes (without proposed project) were derived by applying an annual growth rate factor of one-percent to existing traffic volumes to account for eight years of ambient traffic growth as directed by City of Lancaster staff. The application of an annual growth rate factor inherently includes the addition of trips due to approved projects in the approximate study area.

Forecast year 2010 without project conditions assume implementation of improvements recommended to eliminate existing conditions deficiencies.

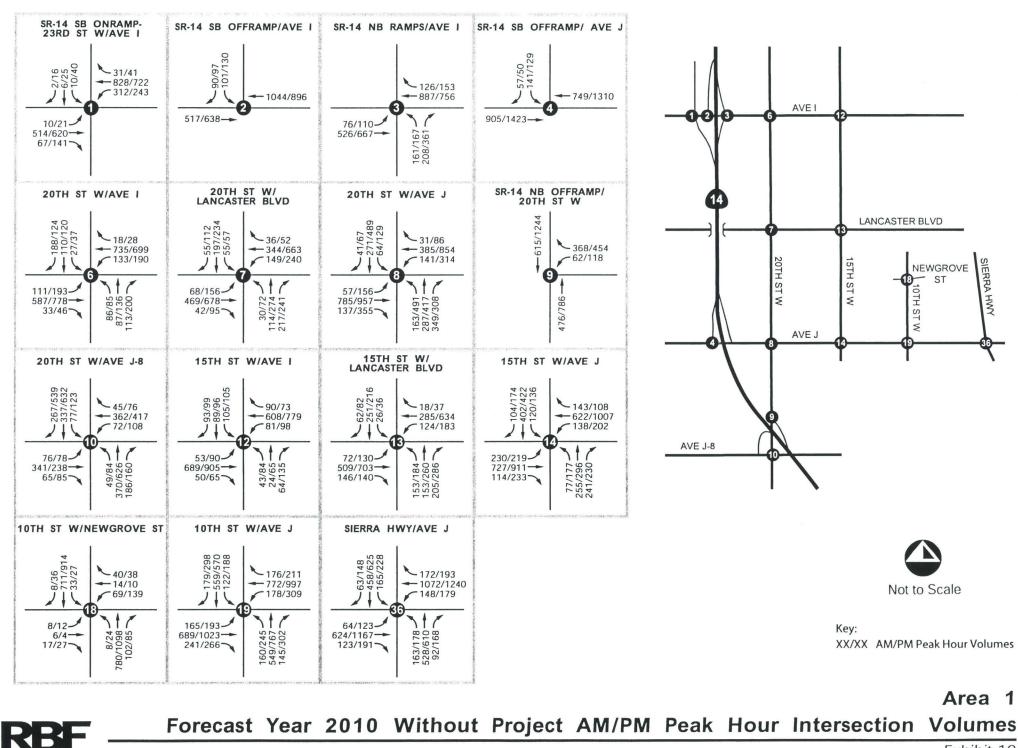
#### Forecast Year 2010 Without Project Conditions Peak Hour LOS

Exhibits 10 and 11 show forecast year 2010 without project conditions peak hour intersection traffic volumes. Table 5 summarizes the a.m. and p.m. peak hour LOS of the study intersections; detailed LOS analysis sheets are provided in Appendix B.

	V/C		Delay		LOS	
Study Intersection	АМ	РМ	AM	РМ	AM	РМ
SR-14 SB On-ramp-23rd St W/Ave I	0.46	0.47	N/A	N/A	А	А
SR-14 SB Off-ramp/Ave I	0.49	0.46	N/A	N/A	А	А
SR-14 NB Ramps/Ave I	0.56	0.63	N/A	N/A	А	В
SR-14 SB Off-ramp/Ave J	0.38	0.48	N/A	N/A	А	А
20 <sup>th</sup> St W/Ave I	0.50	0.53	N/A	N/A	А	A
20th St W/Lancaster Blvd	0.43	0.61	N/A	N/A	А	В
20 <sup>th</sup> St W/Ave J	0.64	0.88	N/A	N/A	В	D
SR-14 NB Off-ramp/20 <sup>th</sup> St W	0.48	0.64	N/A	N/A	А	В
20 <sup>th</sup> St W/Ave J-8	0.47	0.69	N/A	N/A	А	В
15 <sup>th</sup> St W/Ave I	0.41	0.51	N/A	N/A	А	А
15th St W/Lancaster Blvd	0.58	0.69	N/A	N/A	А	В
15 <sup>th</sup> St W/Ave J	0.71	0.88	N/A	N/A	с	D
10 <sup>th</sup> St W/Ave I	0.61	0.80	N/A	N/A	В	С
10 <sup>th</sup> St W/Jackman St	0.36	0.48	N/A	N/A	А	А
10th St W/Lancaster Blvd	0.56	0.75	N/A	N/A	А	С
10th St W/Newgrove St	0.37	0.47	N/A	N/A	А	A

 Table 5

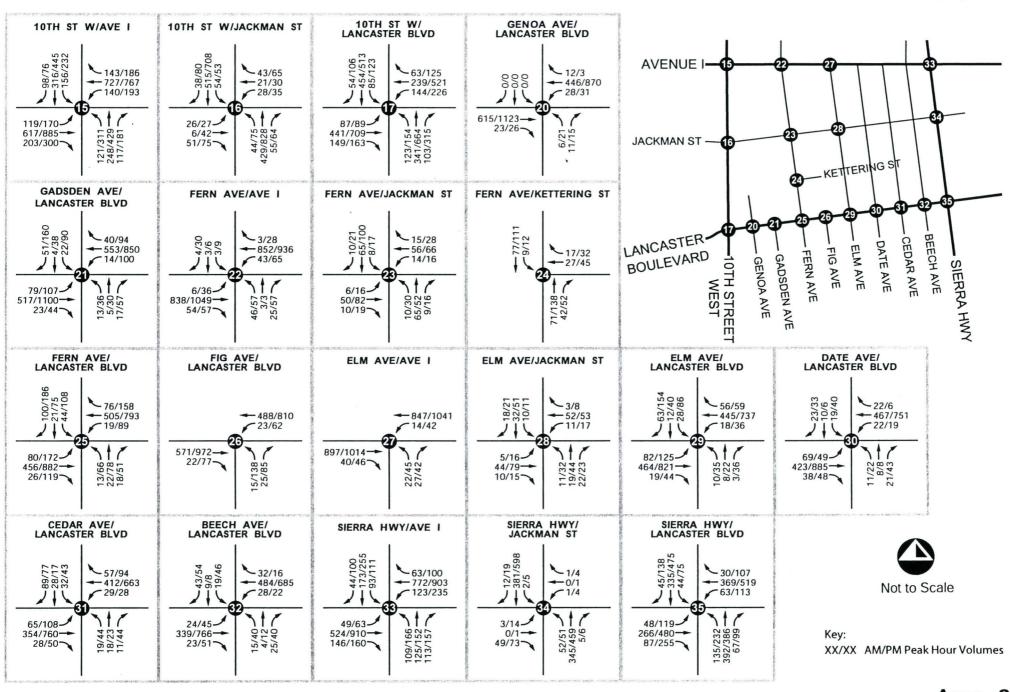
 Forecast Year 2010 Without Project Peak Hour LOS



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Exhibit 10



Area 2



Forecast Year 2010 Without Project AM/PM Peak Hour Intersection Volumes

10 <sup>th</sup> St W/Ave J	0.55	0.75	N/A	N/A	A	С
Genoa Ave/Lancaster Blvd	N/A	N/A	13.3	37.2	В	E
Gadsden Ave/Lancaster Blvd	0.37	0.65	N/A	N/A	А	В
Fern Ave/Ave I	0.35	0.43	N/A	N/A	А	A
Fern Ave/Jackman St	N/A	N/A	8.1	8.6	А	A
Fern Ave/Kettering St	N/A	N/A	9.3	10.1	А	В
Fern Ave/Lancaster Blvd	0.42	0.71	N/A	N/A	А	С
Fig Ave/Lancaster Blvd	0.32	0.55	N/A	N/A	A	A
Elm Ave/Ave I	N/A	N/A	19.7	39.2	С	E
Elm Ave/Jackman St	N/A	N/A	7.7	8.3	А	A
Elm Ave/Lancaster Blvd	0.34	0.54	N/A	N/A	А	A
Date Ave/Lancaster Blvd	0.33	0.46	N/A	N/A	А	А
Cedar Ave/Lancaster Blvd	0.41	0.56	N/A	N/A	А	А
Beech Ave/Lancaster Blvd	0.33	0.46	N/A	N/A	А	А
Sierra Hwy/Ave I	0.47	0.72	N/A	N/A	А	С
Sierra Hwy/Jackman St	N/A	N/A	12.5	17.0	В	С
Sierra Hwy/Lancaster Blvd	0.44	0.69	N/A	N/A	А	В
Sierra Hwy/Ave J	0.51	0.60	N/A	N/A	A	А

Note: N/A = Not Applicable. Deficient intersection operation shown in bold.

As shown in Table 5, two study intersections are forecast to operate at a deficient LOS (LOS E or worse) according to City of Lancaster performance criteria for forecast year 2010 without project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only);
- Elm Avenue/Avenue I (p.m. peak hour only).

#### Forecast Year 2010 Without Project Conditions Signal Warrant Analysis

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether forecast year 2010 without project traffic volumes at the deficiently operating intersections warrant signalization.

Table 6 summarizes the results of the signal warrant analysis for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 without project conditions; detailed traffic signal warrant calculation sheets are contained in Appendix C.

Table 6
Forecast Year 2010 Without Project Conditions
Genoa Avenue/Lancaster Boulevard Signal Warrant Analysis

Warrant Type	Warrant Required Lancaster Blvd Daily Volume (2 directions)	Forecast Lancaster Blvd Daily Volume (2 directions)	Lancaster Blvd Warrant Satisfied? (% Satisfied)	Warrant Required Genoa Avenue Daily Volume (1 direction)	Forecast Genoa Avenue Daily Volume (1 direction)	Genoa Avenue Warrant Satisfied? (% Satisfied)	Signalization of Intersection Warranted?
Minimum Vehicular	6,720	20,420	Yes (100%)	2,240	360	No (21%)	
Interruption of Continuous Traffic	10,080	20,420	Yes (100%)	1,120	360	No (42%)	NO

As seen in Table 6, neither the *Minimum Vehicular Traffic Signal Warrant* nor the *Interruption of Continuous Traffic Signal Warrant* are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 without project conditions.

Table 7 summarizes the results of the signal warrant analysis for the Elm Avenue/Avenue I intersection for forecast year 2010 without project conditions; detailed traffic signal warrant calculation sheets are contained in Appendix C.

Table 7
Forecast Year 2010 Without Project Conditions
Elm Avenue/Avenue I Signal Warrant Analysis

Warrant Type	Warrant Required Avenue I Daily Volume (2 directions)	Forecast Avenue I Daily Volume (2 directions)	Avenue I Warrant Satisfied? (% Satisfied)	Warrant Required Elm Avenue Daily Volume (1 direction)	Forecast Elm Avenue Daily Volume (1 direction)	Elm Avenue Warrant Satisfied? (% Satisfied)	Signalization of Intersection Warranted?
Minimum Vehicular	6,720	21,460	Yes (100%)	1,680	870	No (52%)	
Interruption of Continuous Traffic	10,080	21,460	Yes (100%)	850	870	Yes (100%)	NO

As seen in Table 7, the *Minimum Vehicular Signal Warrant* is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 without project conditions.

#### PROPOSED PROJECT

The proposed NRTVP project consists of a mix of residential, commercial, and institutional (educational and religious) uses. The project area comprises approximately 100 acres within an area generally bounded by Avenue I to the north, Lancaster Boulevard to the south, Sierra Highway to the east, and 10<sup>th</sup> Street West to the west. Existing project area land uses includes residential, commercial, industrial and institutional uses. Access for the project is provided by Avenue I, Lancaster Boulevard, Sierra Highway, and 10<sup>th</sup> Street West. The project proposes vacating a portion of Date Avenue, Cedar Avenue, and Beech Avenue at each roadways' intersection with Avenue I, and extending Beech Avenue westerly to intersect with Elm Avenue south of the Elm Avenue/Avenue I intersection. Exhibit 12 shows the planning areas within the project area.

#### **Project Trip Generation**

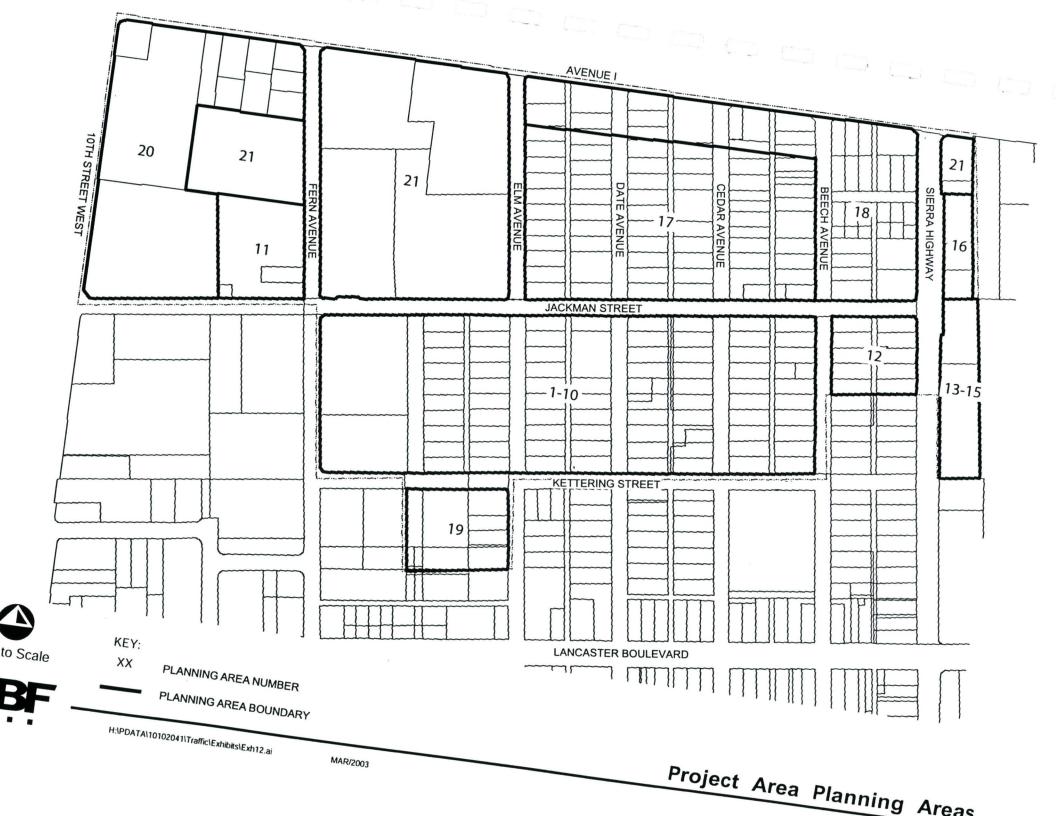
To calculate trips forecast to be generated by the proposed project, *Institute of Transportation Engineers (ITE) Trip Generation* rates were utilized.

Since the project area is occupied by various land uses which are currently generating trips, the actual forecast project area trip generation consists of the trips forecast to be generated by the proposed project minus the existing trips generated by existing land uses currently that are removed by the proposed project.

Table 8 summarizes the *ITE* trip generation rates used to calculate the number of trips forecast to be generated by the proposed project.

Proposed Project Area Trip Rates										
	AM Peak Hour Rates			Rates	PM Pe	Daily				
Land Use (ITE Code)	Units	In	Out	Total	In	Out	Total	Trip Rate		
General Light Industrial (110)	tsf	0.81	0.11	0.92	0.12	0.86	0.98	6.97		
Single-Family Detached Housing (210)	du	0.19	0.58	0.77	0.65	0.37	1.02	9.57		
Apartment (220)	du	0.08	0.43	0.51	0.42	0.20	0.62	6.63		
Residential Condominium (230)	du	0.07	0.37	0.44	0.36	0.18	0.54	5.86		
Junior High School (522)	stu	0.26	0.19	0.45	0.15	0.14	0.29	1.45		
High School (530)	stu	0.32	0.14	0.46	0.09	0.21	0.30	1.79		
Church (560)	tsf	0.39	0.33	0.72	0.36	0.30	0.66	9.11		
Day Care Center (565)	tsf	6.74	5.97	12.71	6.20	7.00	13.20	79.26		
General Office Building (710)	tsf	1.37	0.19	1.56	0.25	1.24	1.49	11.01		
Medical-Dental Office (720)	tsf	1.94	0.49	2.43	0.99	2.67	3.66	36.13		

Table 8 Proposed Project Area Trip Rate



Specialty Retail Center (814)	tsf	0.00	0.00	0.00	1.11	1.48	2.59	40.67
Automobile Parts Sales (843)	tsf	1.11	1.10	2.21	2.93	3.05	5.98	61.91

Source: 1997 ITE Trip Generation Manual

Note: du = dwelling unit, stu = student, tsf = thousand square feet

Table 9 summarizes the forecast trip generation of the removed study area uses utilizing the trip generation rates shown in Table 8.

A	Land Has	Halta	AM F	Peak Ho	ur Trips	PM Pe	eak Hou	ır Trips	Daily
Area	Land Use	Units	In	Out	Total	In	Out	Total	Trips
1-3	Apartment	140 du	11	60	71	59	28	87	928
4-10	Single-Family Detached Housing	12 du	2	7	9	8	4	12	115
4-10	Church (Salvation Army)	6.47 tsf	3	2	5	2	2	4	59
4-10	Junior High School (7th Day Adventist)	54 stu	14	10	24	8	8	16	78
11	Single-Family Detached Housing	1 du	0	1	1	1	0	1	10
12	Apartment	17 du	1	7	8	7	3	10	113
12	Automobile Parts Sales	6.70 tsf	7	7	14	20	20	40	415
17	Single-Family Detached Housing	8 du	2	5	7	5	3	8	77
17	Residential Condominium	6 du	0	2	2	2	1	3	35
17	Apartment	6 du	0	3	3	3	1	4	40
17	General Office (St. Vincent de Paul)	3.65 tsf	5	1	6	1	5	6	40
18	Specialty Retail Center	11.76 tsf	0	0	0	13	17	30	478
18	Automobile Parts Sales	21.28 tsf	24	23	47	62	65	127	1,317
18	Light Industrial	8.78 tsf	7	1	8	1	8	9	61
19	Single-Family Detached Housing	6 du	1	3	4	4	2	6	57
		TOTAL	77	132	209	196	167	363	3,823

Table 9 Removed Project Area Land Use Trip Generation

**Note:** du = dwelling unit, stu = student, tsf = thousand square feet

As shown in Table 9, existing study area uses that will be removed by the proposed project are currently generating approximately 3,823 daily trips, which includes approximately 209 a.m. peak hour trips and approximately 363 p.m. peak hour trips.

Table 10 summarizes the trips forecast to be generated by the proposed project utilizing the trip generation rates shown in Table 8; note, no project-related change is planned for Planning Area 21.

			AM Pe	eak Hou	ır Trips	PM Pe	eak Hou	ır Trips	Daily
Area	Land Use	Units	In	Out	Total	In	Out	Total	Trips
1-3	Junior High School (Desert Christian)	750 du	195	143	338	113	105	218	1,088
1-3	High School (Desert Christian)	750 du	240	105	345	68	158	226	1,343
4-10	Church (Sacred Heart)	31.30 tsf	12	10	22	11	9	20	285
4-10	Junior High School (Sacred Heart)	350 du	91	67	158	53	49	102	508
4-10	Day Care Center	7.30 tsf	49	44	93	45	51	96	578
11	General Office (Children's Center AV)	14.06 tsf	19	3	22	4	17	21	155
12	Medical Office (Mental Health Assoc.)	23.57 tsf	46	12	58	23	63	86	852
13	General Office (St. Vincent de Paul)	10.00 tsf	14	2	16	3	12	15	110
14-15	Church (Salvation Army)	16.80 tsf	7	6	13	6	5	11	153
17	Single-Family Detached Housing	7 du	1	4	5	5	3	8	67
17	Residential Condominium	2 du	0	1	1	1	0	1	12
18	Residential Condominium	50 du	4	19	23	18	9	27	293
18	Apartment	132 du	11	57	68	55	26	81	875
18	Specialty Retail Center	14.00 tsf	0	0	0	16	21	37	569
18	General Office	14.00 tsf	19	3	22	4	17	21	154
19	Apartment	76 du	6	33	39	32	15	47	504
20	Specialty Retail Center	36.00 tsf	0	0	0	40	53	93	1,464
20	General Office	24.00 tsf	33	5	38	6	30	36	264
		TOTAL	747	514	1,261	503	643	1,146	9,274

Table 10 Forecast NRTVP Project Trip Generation

Note: du = dwelling unit, stu = student, tsf = thousand square feet

As shown in Table 10, the proposed NRTVP project is forecast to generate approximately9,274 daily trips, which includes approximately 1,261 a.m. peak hour trips and approximately 1,146 p.m. peak hour trips.

Table 11 shows the net forecast NRTVP trip generation which takes into account the trips associated with the uses that will be removed by the proposed project shown in Table 9.

15

	AM P	eak Hour	Trips	PM P	eak Hour	Daily		
Land Use	In	Out	Total	In	Out	Total	Trips	
Existing Removed Project Area Uses	-77	-132	-209	-196	-167	-363	-3,823	
Proposed NRTVP Project	747	514	1,261	503	643	1,146	9,274	
TOTAL	640	382	1,052	307	476	783	5,451	

Table 11 Net Forecast NRTVP Project Trip Generation

As shown in Table 11, the proposed project is forecast to generate a net change of approximately 5,451 new daily trips, which includes approximately 1,052 new a.m. peak hour trips and approximately 783 new p.m. peak hour trips.

#### **Project Trip Distribution**

Exhibit 13 shows the forecast trip percent distribution of project-generated trips approved by City of Lancaster staff.

#### Project Trip Assignment

Exhibits 14 and 15 show the corresponding assignment of project-generated daily and peak hour trips assuming the trip percent distribution shown in Exhibit 13.

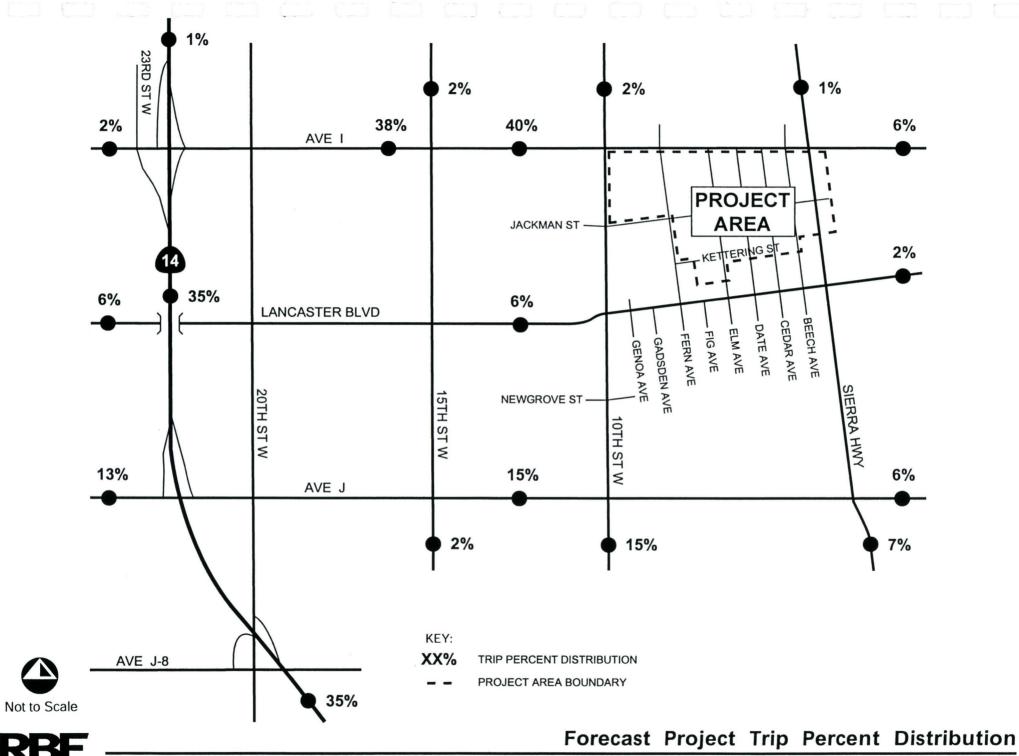
#### FORECAST YEAR 2010 WITH PROJECT CONDITIONS

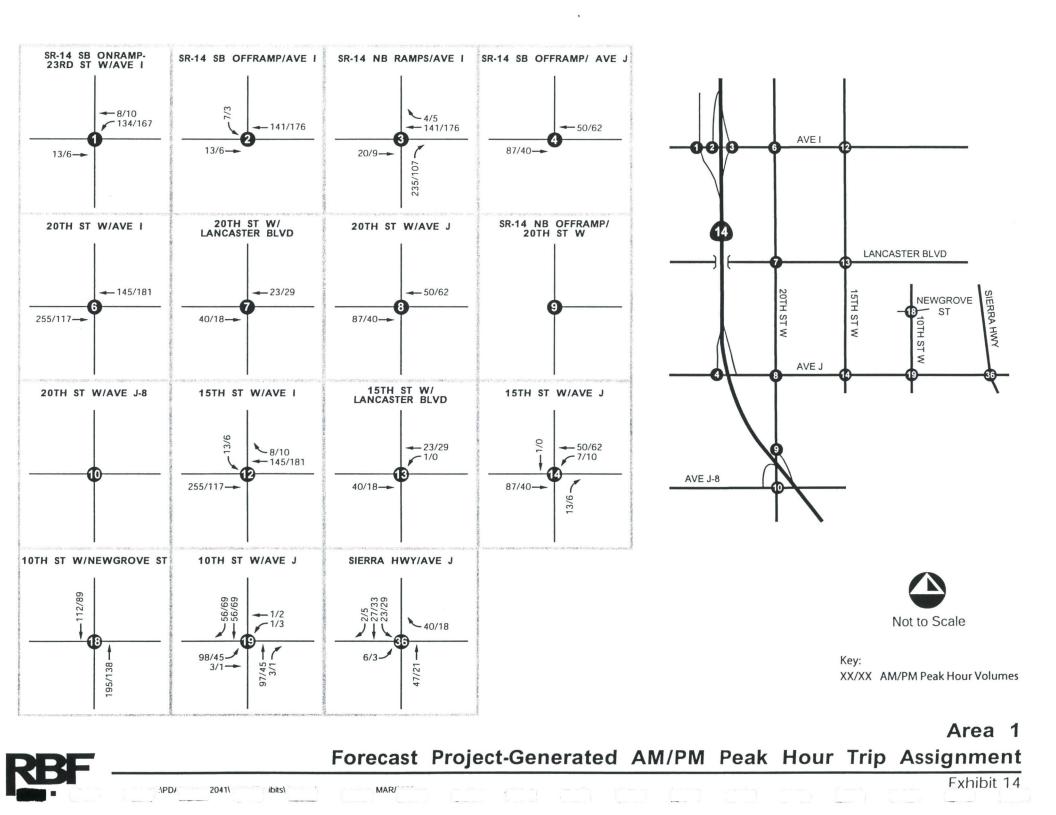
Forecast year 2010 with proposed project traffic volumes were derived by adding forecast projectgenerated trips to forecast year 2010 without project traffic volumes.

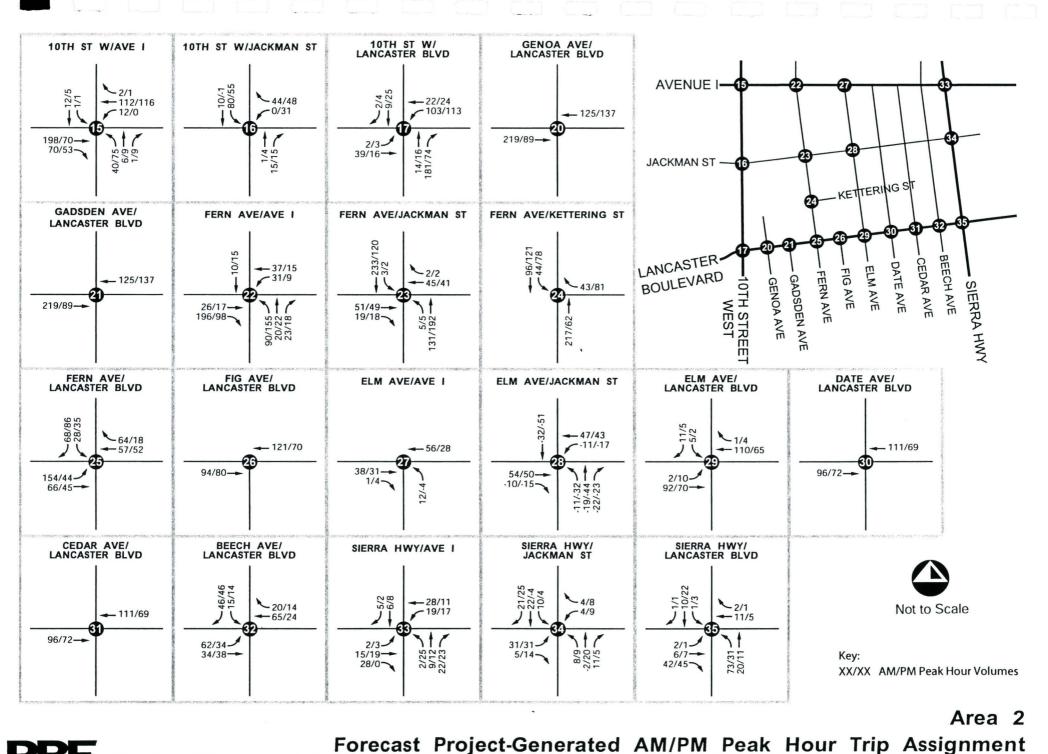
Forecast year 2010 with project conditions assume implementation of improvements recommended to eliminate existing deficiencies.

#### Forecast Year 2010 With Project Conditions Peak Hour LOS

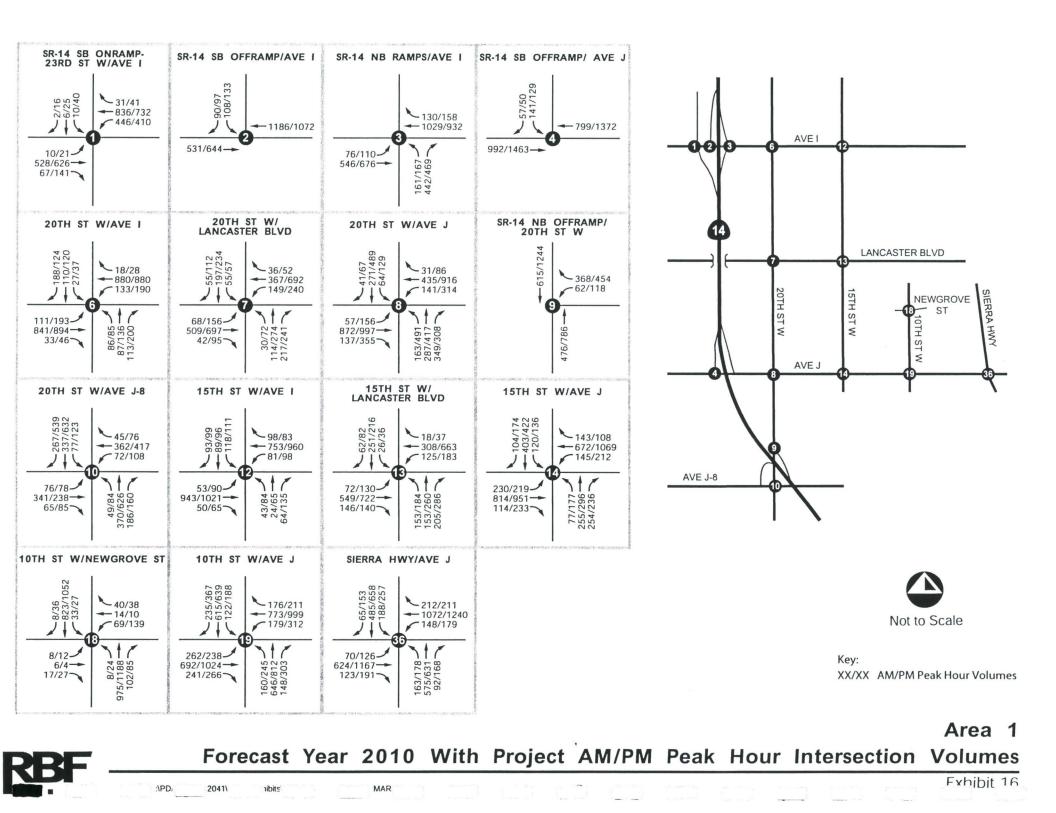
Exhibits 16 and 17 show forecast year 2010 with project conditions peak hour intersection traffic volumes. Table 12 summarizes the a.m. and p.m. peak hour LOS of the study intersections; detailed LOS analysis sheets are provided in Appendix B.



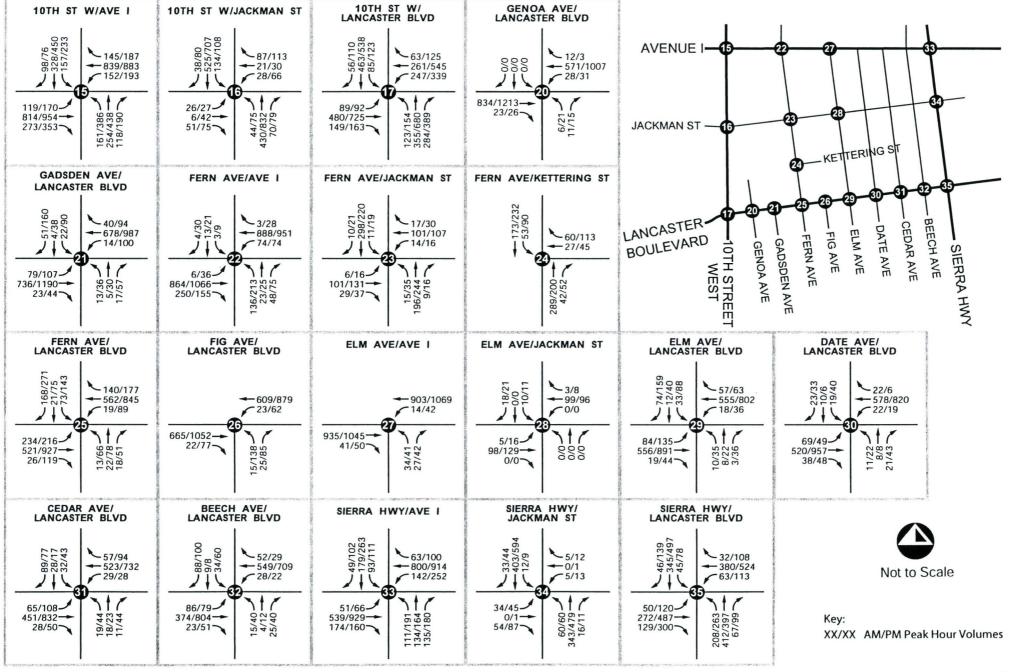




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## Area 2

Forecast Year 2010 With Project AM/PM Peak Hour Intersection Volumes

Forecast Y	1	/C		lay		DS	Significant
Study Intersection	AM	РМ	AM	РМ	AM	РМ	Impact?
SR-14 SB On-ramp-23rd St W/Ave I	0.55	0.58	N/A	N/A	А	A	No
SR-14 SB Off-ramp/Ave I	0.54	0.52	N/A	N/A	A	A	No
SR-14 NB Ramps/Ave I	0.75	0.75	N/A	N/A	С	С	No
SR-14 SB Off-ramp/Ave J	0.40	0.49	N/A	N/A	А	A	No
20 <sup>th</sup> St W/Ave I	0.53	0.56	N/A	N/A	А	A	No
20th St W/Lancaster Blvd	0.44	0.62	N/A	N/A	A	В	No
20 <sup>th</sup> St W/Ave J	0.66	0.89	N/A	N/A	В	D	No
SR-14 NB Off-ramp/20th St W	0.48	0.64	N/A	N/A	A	В	No
20 <sup>th</sup> St W/Ave J-8	0.47	0.69	N/A	N/A	A	В	No
15 <sup>th</sup> St W/Ave I	0.47	0.54	N/A	N/A	А	A	No
15th St W/Lancaster Blvd	0.59	0.69	N/A	N/A	A	В	No
15 <sup>th</sup> St W/Ave J	0.73	0.90	N/A	N/A	С	D	No
10 <sup>th</sup> St W/Ave I	0.67	0.89	N/A	N/A	В	D	No
10 <sup>th</sup> St W/Jackman St	0.38	0.51	N/A	N/A	А	A	No
10th St W/Lancaster Blvd	0.64	0.86	N/A	N/A	В	D	No
10th St W/Newgrove St	0.41	0.49	N/A	N/A	А	A	No
10 <sup>th</sup> St W/Ave J	0.61	0.77	N/A	N/A	В	С	No
Genoa Ave/Lancaster Blvd	N/A	N/A	16.6	48.3	С	E	No
Gadsden Ave/Lancaster Blvd	0.40	0.68	N/A	N/A	А	В	No
Fern Ave/Ave I	0.49	0.57	N/A	N/A	А	A	No
Fern Ave/Jackman St	N/A	N/A	11.5	11.9	В	В	No
Fern Ave/Kettering St	N/A	N/A	11.6	12.1	В	В	No
Fern Ave/Lancaster Blvd	0.59	0.81	N/A	N/A	А	D	No
Fig Ave/Lancaster Blvd	0.34	0.58	N/A	N/A	А	A	No
Elm Ave/Ave I	N/A	N/A	25.2	39.6	D	E	No
Elm Ave/Jackman St	N/A	N/A	8.0	8.2	А	А	No
Elm Ave/Lancaster Blvd	0.38	0.57	N/A	N/A	А	А	No
Date Ave/Lancaster Blvd	0.36	0.48	N/A	N/A	А	A	No

Table 12Forecast Year 2010 With Project Peak Hour LOS

Cedar Ave/Lancaster Blvd	0.45	0.58	N/A	N/A	А	A	No
Beech Ave/Lancaster Blvd	0.42	0.50	N/A	N/A	А	А	No
Sierra Hwy/Ave I	0.50	0.75	N/A	N/A	А	с	No
Sierra Hwy/Jackman St	N/A	N/A	13.6	19.1	В	с	No
Sierra Hwy/Lancaster Blvd	0.50	0.74	N/A	N/A	А	с	No
Sierra Hwy/Ave J	0.52	0.61	N/A	N/A	A	В	No

Note: N/A = Not Applicable. Deficient intersection operation shown in bold.

As seen by comparing Table 12 (forecast year 2010 with project LOS) to Table 5 (forecast year 2010 without project LOS), with the addition of project-generated trips, the following two study intersections are forecast to continue operating at a deficient LOS (LOS E or worse) according to City of Lancaster performance criteria for forecast year 2010 with project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only); and
- Elm Avenue/Avenue I (p.m. peak hour only).

As seen by comparing Table 12 (forecast year 2010 with project LOS) to Table 5 (forecast year 2010 without project LOS), the addition of project-generated trips at the study intersections does not cause any of the study intersections to change from LOS D to LOS E or LOS F; therefore, based on City of Lancaster established thresholds of significance, the proposed project does not cause any significant traffic impacts to occur.

## Forecast Year 2010 With Project Conditions Signal Warrant Analysis

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether forecast year 2010 with project traffic volumes at the deficiently operating intersection warrant signalization.

Table 13 summarizes the results of the signal warrant analysis for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 with project conditions; detailed traffic signal warrant calculation sheets are contained in Appendix C.

## Table 13Forecast Year 2010 With Project ConditionsGenoa Avenue/Lancaster Boulevard Signal Warrant Analysis

Warrant Type	Warrant Required Lancaster Blvd Daily Volume (2 directions)	Forecast Lancaster Blvd Daily Volume (2 directions)	Lancaster Blvd Warrant Satisfied? (% Satisfied)	Warrant Required Genoa Avenue Daily Volume (1 direction)	Forecast Genoa Avenue Daily Volume (1 direction)	Genoa Avenue Warrant Satisfied? (% Satisfied)	Signalization of Intersection Warranted?
Minimum Vehicular	6,720	22,690	Yes (100%)	2,240	360	No (21%)	
Interruption of Continuous Traffic	10,080	22,690	Yes (100%)	1,120	360	No (42%)	NO

As seen in Table 13, neither the *Minimum Vehicular Traffic Signal Warrant* nor the *Interruption of Continuous Traffic Signal Warrant* are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 with project conditions.

Table 14 summarizes the results of the signal warrant analysis for the Elm Avenue/Avenue I intersection for forecast year 2010 with project conditions; detailed traffic signal warrant calculation sheets are contained in Appendix C.

# Table 14Forecast Year 2010 With Project ConditionsElm Avenue/Avenue I Signal Warrant Analysis

Warrant Type	Warrant Required Avenue I Daily Volume (2 directions)	Forecast Avenue I Daily Volume (2 directions)	Avenue I Warrant Satisfied? (% Satisfied)	Warrant Required Elm Avenue Daily Volume (1 direction)	Forecast Elm Avenue Daily Volume (1 direction)	Elm Avenue Warrant Satisfied? (% Satisfied)	Signalization of Intersection Warranted?
Minimum Vehicular	6,720	22,050	Yes (100%)	1,680	830	No (49%)	
Interruption of Continuous Traffic	10,080	22,050	Yes (100%)	850	830	Yes (100%)	NO

As seen in Table 14, the *Minimum Vehicular Signal Warrant* is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 with project conditions.

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## LOS ANGELES COUNTY CONGESTION MANAGEMENT PROGRAM

The purpose of the Congestion Management Program (CMP) is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use and air quality planning programs throughout the County. The program is consistent with that of the Southern California Association of Governments (SCAG). The CMP program requires review of significant individual projects which might on their own impact the CMP transportation system.

## CMP Study Area

According to the CMP (Los Angeles County Metropolitan Transportation Authority, June 2002), those proposed developments which meet the following criteria shall be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on- or offramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hours (of adjacent street traffic).
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hours.

Utilizing the CMP guidelines the following five intersections are included in the CMP study area:

- SR-14 SB On-ramp-23<sup>rd</sup> St W/Ave I (signalized);
- SR-14 SB Off-ramp/Ave I (signalized);
- SR-14 NB Ramps/Ave I (signalized);
- SR-14 SB Off-ramp/Ave J (signalized); and
- SR-14 NB Off-ramp/20<sup>th</sup> St W (signalized).

Utilizing the CMP guidelines the following three mainline segments are included in the CMP study area:

- SR-14 between Avenue I and Avenue J;
- SR-14 between Avenue J and Avenue J-8/20<sup>th</sup> Street West; and
- SR-14 between Avenue J-8/20<sup>th</sup> Street West and Avenue K.

## **CMP Analysis Methodology**

Freeway mainline LOS is determined through calculation of the volume-to-capacity (V/C) ratio and associated LOS according as shown in Table 15.

V/C & LOS Ranges Freeway Segments				
V/C Ratio	LOS			
0.00 - 0.35	A			
≥ 0.35 - 0.54	В			
≥ 0.54 - 0.77	С			
<u>≥</u> 0 .77 - 0.93	D			
<u>≥</u> 0.93 - 1.00	E			
<u>≥</u> 1.00	F			

Table 15

Source: 2002 Congestion Management Program for Los Angeles County

### CMP Thresholds of Significance

To determine whether the addition of project-generated trips results in a significant impact at a CMP study facility, and thus requires mitigation, the Los Angeles County CMP utilizes the following threshold of significance:

A significant project impact occurs when a proposed project increases traffic demand at a CMP study facility by 2% of capacity (V/C ≥ 0.02), causing or worsening LOS F (V/C > 1.00). 

## CMP LOS ANALYSIS

#### Forecast Year 2010 With Project Conditions SR-14 Freeway Segment LOS

Existing ADT volume data for SR-14 was obtained from the *Caltrans* web site. Forecast year 2010 traffic volumes (without proposed project) were derived by applying an annual growth rate factor of 1.55-percent to existing traffic volumes to account for nine years of ambient traffic growth in accordance with Exhibit D-1 in the Los Angeles County CMP.

Forecast year 2010 with proposed project traffic volumes were derived by adding forecast projectgenerated trips to forecast year 2010 without project traffic volumes.

Table 16 summarizes the existing a.m. and p.m. peak hour LOS of the CMP study segments.

Study Segment	Forecast Year 2010 Without Project	Forecast Year 2010 With Project	Change in	Significant	
	V/C - LOS V/C - LOS		V/C Ratio	Impact?	
SR-14 SB between Ave I & Ave J	0.78 - D	0.80 - D	0.02	No	
SR-14 SB between Ave J & Ave J-8	0.66 - C	0.68 - C	0.02	No	
SR-14 SB between Ave J-8 & Ave K	0.94 - E	0.96 - E	0.02	No	
SR-14 NB between Ave I & Ave J	0.78 - D	0.81 - D	0.03	No	
SR-14 NB between Ave J & Ave J	0.66 - C	0.69 - C	0.03	No	
SR-14 NB between Ave J-8 & Ave K	0.94 - E	0.98 - E	0.04	No	

Table 16Forecast Year 2010 With Project Peak Hour SR-23 Freeway Segment LOS

As seen in Table 16, the addition of project-generated trips at the CMP study segments does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

## Forecast Year 2010 With Project Conditions Intersection Peak Hour LOS

Forecast year 2010 with proposed project traffic volumes were derived by adding forecast projectgenerated trips to forecast year 2010 without project traffic volumes.

Forecast year 2010 with project conditions assume implementation of improvements recommended to eliminate existing deficiencies and forecast year 2010 without project deficiencies.

## Forecast Year 2010 With Project Conditions Peak Hour LOS

Table 17 summarizes the a.m. and p.m. peak hour LOS of the CMP study intersections; detailed LOS analysis sheets are provided in Appendix B.

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Forecast Year 2010 with Project Peak Hour Intersection LOS						
	Forecast Year 2010 Without Project		Forecast Ye Pro			
Study Intersection	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	Significant Impact?	
	V/C - LOS	V/C - LOS	V/C - LOS	V/C - LOS		
SR-14 SB On-ramp-23rd St W/Ave I	0.46 - A	0.47 - A	0.55 - A	0.58 - A	No	
SR-14 SB Off-ramp/Ave I	0.49 - A	0.46 - A	0.54 - A	0.52 - A	No	
SR-14 NB Ramps/Ave I	0.56 - A	0.63 - B	0.75 - C	0.75 - C	No	
SR-14 SB Off-ramp/Ave J	0.38 - A	0.48 - A	0.40 - A	0.49 - A	No	
SR-14 NB Off-ramp/20 <sup>th</sup> St W	0.48 - A	0.64 - B	0.48 - A	0.64 - B	No	

Table 17Forecast Year 2010 With Project Peak Hour Intersection LOS

As seen Table 17, the addition of project-generated trips at the CMP study intersections does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

## MITIGATION MEASURES

No traffic mitigation measures are required for the proposed project based on City of Lancaster established thresholds of significance.

## CONCLUSIONS

One study intersection is currently operating at a deficient LOS (LOS E or worse) according to City of Lancaster performance criteria:

• Fig Avenue/Lancaster Boulevard (p.m. peak hour only).

Based on existing traffic volumes, the Fig Avenue/Lancaster Boulevard intersection satisfies the *Caltrans Peak Hour Volume* signal warrant.

To eliminate the existing conditions deficiency at the Fig Avenue/Lancaster Boulevard intersection, the following improvement is recommended:

Fig Avenue/Lancaster Boulevard - Signalize intersection.

Assuming implementation of the recommended improvement, the Fig Avenue/Lancaster Boulevard intersection is forecast to operate at an acceptable LOS (LOS D or better) during the a.m. and p.m. peak hour under existing conditions.

Two study intersections are forecast to operate at a deficient LOS (LOS E or worse) for forecast year 2010 without project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only);
- Elm Avenue/Avenue I (p.m. peak hour only).

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing *Caltrans Traffic Manual* analysis methodology to determine whether forecast year 2010 without project traffic volumes at the deficiently operating intersections warrant signalization.

Neither the *Minimum Vehicular Traffic Signal Warrant* nor the *Interruption of Continuous Traffic Signal Warrant* are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast year 2010 without project conditions.

The *Minimum Vehicular Signal Warrant* is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 without project conditions.

Since the project area is occupied by various land uses which are currently generating trips, the actual forecast project area trip generation consists of the trips forecast to be generated by the proposed project minus the existing trips generated by existing land uses currently that are removed by the proposed project.

Existing study area uses that will be removed by the proposed project are currently generating approximately 3,823 daily trips, which includes approximately 209 a.m. peak hour trips and approximately 363 p.m. peak hour trips. The proposed project is forecast to generate a net change of approximately 5,451 new daily trips, which includes approximately 1,052 new a.m. peak hour trips and approximately 783 new p.m. peak hour trips.

With the addition of project-generated trips, the following two study intersections are forecast to continue operating at a deficient LOS (LOS E or worse) for forecast year 2010 with project conditions:

- Genoa Avenue/Lancaster Avenue (p.m. peak hour only); and
- Elm Avenue/Avenue I (p.m. peak hour only).

The addition of project-generated trips to the study intersections does not cause any of the study intersections to change from LOS D to LOS E or LOS F; therefore, based on City of Lancaster established thresholds of significance, the proposed project does not cause any significant traffic impacts to occur.

A signal warrant analysis was prepared for the Genoa Avenue/Lancaster Avenue intersection and the Elm Avenue/Avenue I intersection utilizing Caltrans Traffic Manual analysis methodology to determine whether forecast year 2010 with project traffic volumes at the deficiently operating Neither the Minimum Vehicular Traffic Signal Warrant nor the Interruption of Continuous Traffic Signal Warrant are satisfied for the Genoa Avenue/Lancaster Boulevard intersection for forecast The Minimum Vehicular Signal Warrant is not satisfied for the Elm Avenue/Avenue I intersection for forecast year 2010 with project conditions.

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The addition of project-generated trips at the CMP study segments does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

The addition of project-generated trips at the CMP study intersections does not result in a significant impact according to the Los Angeles County CMP established thresholds of significance for forecast year 2010 with project conditions.

H:\pdata\10102041\Traffic\Admin\041.Trf.wpd

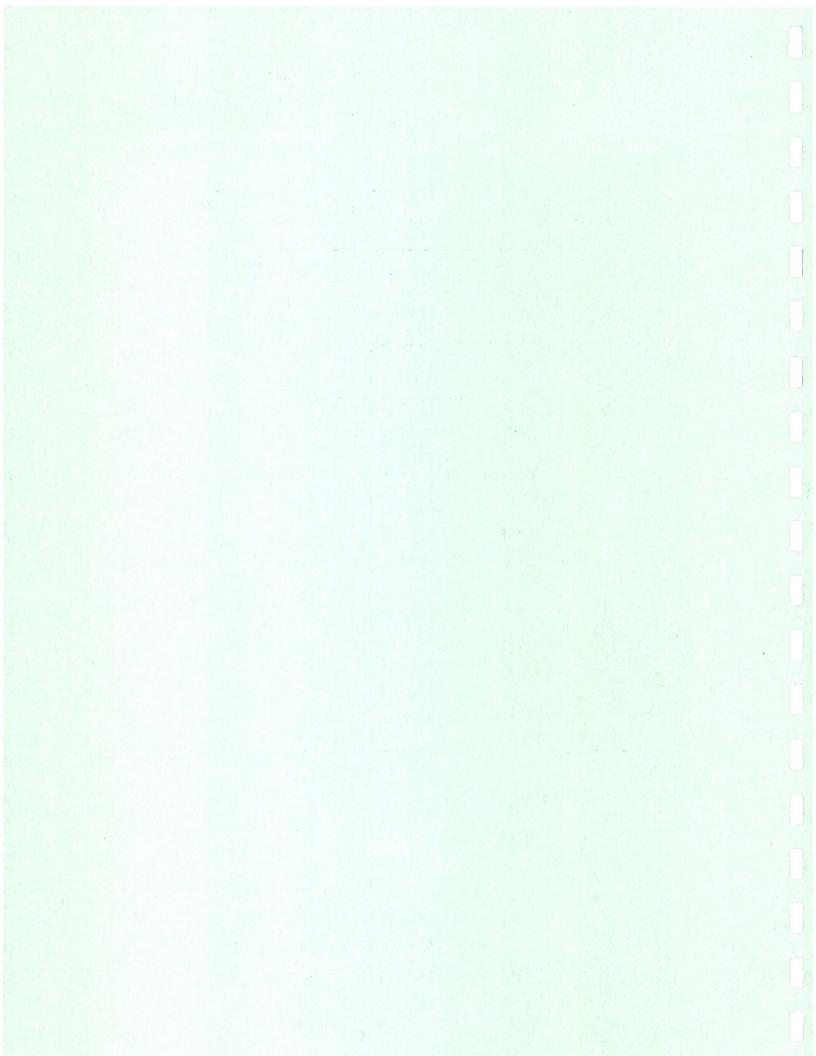
intersection warrant signalization.

year 2010 with project conditions.

NOTE TO REVIEWERS:

THE TRAFFIC STUDY TECHNICAL APPENDICES ARE AVAILABLE FROM THE CITY UPON REQUEST. PLEASE CONTACT GLENN LAJOIE AT RBF CONSULTING (949.855.3663).

## 15.4 Air Quality Data



## Parenthetical CALINE4 Assumptions for All Building Phases: North Downtown Neighborhood Transit Village EIR Project 1/27/03

## Job Parameters:

Traffic Study Scenario	Conditions
Future With Project	Year 2010 with Project

Run Type: Worst Case Wind Angle (all models)

(Best general choice per CALINE4 model handbook)

Aerodynamic Roughness Coefficient: Suburban (Coefficient 100 cm) (all models).

(This choice made due to site are being a rough mixture of 50% buildings and 50% open areas (parking lots, landscape areas and open parcels).

## Model Information:

Link/Receptor Geometry Units: All dimensions measured in feet (all models)

Altitude Above Sea Level: 0 Feet

<u>Averaging Interval</u>: Calculated at 1 hour average CO concentration to give clearer representative view of peak events.

## Link Geometry:

Link Name: See each respective model

**Link Type:** All links are assumed to be "at grade" indicating that no roadways are elevated or depressed (all models).

X and Y Endpoints: See each respective model

**Link Height:** All links are assumed to be "at grade" with no elevated areas or bridges, therefore this number is "0" (all models).

**Mixing Zone Width:** This is based on the sum of the width of all throughlanes (assumed 12 feet per lane and includes no turning lanes) plus 3 meters on either side (see table below).

Roadway Link	Mixing Zone Width		
20 <sup>th</sup> Street West/Avenue J	10 <sup>th</sup> St = 52 feet	Ave J = 49.8 feet	
15 <sup>th</sup> Street West/Avenue J	15 <sup>th</sup> St = 52 feet	Ave J = 49.8 feet	
10 <sup>th</sup> Street West/Avenue I	10 <sup>th</sup> St = 52 feet	Ave I= 49.8 feet	
10 <sup>th</sup> Street West/Lancaster Blvd.	10 <sup>th</sup> St = 52 feet	Lancaster = 49.8 feet	
Genoa Avenue/Lancaster Blvd.	Genoa = 52 feet	Lancaster = 49.8 feet	
Fern Avenue/Lancaster Blvd.	Fern = 52 feet	Lancaster = 49.8 feet	

## Link Activity:

**Traffic Volume (VPD) Hour 1:** Corresponding peak hour intersection traffic volume was extrapolated by adding the peak hour turning movements attributable to the end-of-turn roadway of travel.

Roadway Link	Project with Existing Roadway Network Peak Hour Volumes			
	Link A	Link B		
20 <sup>th</sup> Street West/Avenue J	10 <sup>th</sup> St = 1216	Ave J = 1508		
15 <sup>th</sup> Street West/Avenue J	15 <sup>th</sup> St = 732	Ave J = 1409		
10 <sup>th</sup> Street West/Avenue I	10 <sup>th</sup> St = 1014	Ave I= 1477		
10th Street West/Lancaster Blvd.	10 <sup>th</sup> St = 1223	Lancaster = 1009		
Genoa Avenue/Lancaster Blvd.	Genoa = 489	Lancaster = 1262		

**Emissions Factor (g/hr) Hour 1:** All locations modeled assume the following emissions factors (all models).

Roadway Link	Project with Existing Roadway Network Peak Hour Volumes			
	Link A	Link B		
20th Street West/Avenue J	10 <sup>th</sup> St = 9.7	Ave J = 9.7		
15 <sup>th</sup> Street West/Avenue J	15 <sup>th</sup> St = 9.7	Ave J = 9.7		
10 <sup>th</sup> Street West/Avenue I	10 <sup>th</sup> St = 9.7	Ave I= 9.7		
10th Street West/Lancaster Blvd.	10 <sup>th</sup> St = 9.7	Lancaster = 9.7		
Genoa Avenue/Lancaster Blvd.	Genoa = 9.7	Lancaster = 9.7		

## **Run Conditions:**

Wind Speed: 0.5 Meters/Second (all models)

Wind Direction: 0 degrees

Wind Direction Standard Deviation: 30

Atmospheric Stability Class: G (7) (all models)

Mixing Height (meters): 1,000 meters (all models)

Source: <u>User's Guide for CL4: A User Friendly Interface for the CALINE4 Model for</u> Transportation Project Impact Assessments. P. 2-12. Caltrans-UC Davis, 1998.

Ambient Temperature: Winter 14 Celsius (all models).

Ambient Pollutant Concentration (ppm): 5.9 ppm (all models)

**Receptor Positions:** As measured at a distance of 10 feet from the corner of the intersection predicting the highest value.

\*\* CALIMFAC v V2.2 Sep 23 2002 Release \*\* California Motor Vehicle Emissions Factor Model \*\* Mohave Desert Air Basin Avg 2010 January Default Title
\*\* Output file: H:\pdata\10102041\EIR\AQ
\*\* Date of this run: 01\23\03 17:35:15

YEAR: 2025 DEWPOINT: 10	% COLD STARTS	30.0	% LDA	69.0	% LDT	19.4	% MDT	6.4
INSPECTION & MAINTENANCE: YES	% HOT STARTS	70.0	% UBD	1.2	% HDG	3.6	% HDD	0.0
SEASON: WINTER	% HOT STAB	0.0	% MCY	0.4				

#### TABLE 1: ESTIMATED TRAVEL FRACTIONS

LIGHT DUTY	Y AUTOS LIG	GHT DUTY TRUCKS	MED DUTY TRUCKS	URBAN BUS	HEAVY DUTY TRUCKS	MCY
NCAT CA	AT DIESEL NCA	AT CAT DIESEL	NCAT CAT DIESEI	L NCAT C	CAT DIESEL ALL	
% VMT 0.00 100	0.00 0.00 0.0	00 100.00 0.00	0.00 100.00 100.0	0 11.00 8	39.00 100.00 100.00	J
% TRIP 0.00 100	0.0 0.00 0.0	00 100.00 0.00	0.00 100.00 100.0	0 11.00 8	39.00 100.00 100.00	J
% VEH 0.00 99	9.99 0.01 0.0	00 100.00 0.00	0.00 100.00 100.0	0 11.00 8	39.00 100.00 100.00	)

#### TABLE 2: COMPOSITE EMISSION FACTORS

POLLUTANT NAME: CARBON MONOXIDE

IN GRAMS PER MILE

SPEED					TEMPER	ATURE IN	DEGREES 1	FAHRENHEIT				
MPH	30	35	40	45	50	55	60	65	70	75	80	85
IDLE*	2.17	2.07	1.95	1.82	1.69	1.55	1.42	1.30	1.20	1.12	1.09	1.10
3	43.32	41.39	39.07	36.49	33.77	31.04	28.42	26.04	24.01	22.48	21.82	21.92
5	28.05	26.85	25.42	23.83	22.17	20.51	18.92	17.48	16.26	15.34	15.01	15.15
10	15.01	14.39	13.66	12.85	12.00	11.16	10.35	9.63	9.01	8.55	8.42	8.53
15	10.16	9.74	9.25	8.71	8.14	7.58	7.04	6.55	6.14	5.83	5.75	5.83
20	7.65	7.34	6.97	6.56	6.14	5.71	5.31	4.94	4.64	4.41	4.35	4.41
25	6.15	5.90	5.60	5.28	4.94	4.60	4.27	3.98	3.74	3.55	3.50	3.55
30	5.16	4.95	4.71	4.43	4.15	3.87	3.60	3.36	3.15	3.00	2.96	3.00
35	4.48	4.30	4.09	3.86	3.61	3.37	3.14	2.93	2.75	2.62	2.59	2.63
40	4.01	3.85	3.66	3.46	3.24	3.03	2.83	2.64	2.49	2.38	2.35	2.39
45	3.71	3.56	3.39	3.20	3.01	2.82	2.64	2.47	2.34	2.24	2.22	2.26
50	3.56	3.43	3.27	3.10	2.92	2.75	2.58	2.44	2.31	2.22	2.21	2.25
55	3.64	3.51	3.36	3.20	3.03	2.87	2.71	2.58	2.47	2.39	2.39	2.44
60	4.11	3.97	3.82	3.66	3.50	3.34	3.19	3.07	2.96	2.90	2.91	2.98
65	5.56	5.40	5.22	5.05	4.88	4.71	4.57	4.45	4.36	4.31	4.36	4.47
*IDLE	EMISSIONS	IN GRAMS	/MIN, DER	IVED FROM	3 MPH RA	TES						

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - Avenue J/20th Street RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5	M/S	Z0=	100.	CM		ALT=	0.	(M)
BRG= WORST	CASE	VD=	.0	CM/S				
CLAS= 7	(G)	VS=	.0	CM/S				
MIXH= 1000.	Μ		5.9					
SIGTH= 30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

## II. LINK VARIABLES

LINK	*	LINK	COORDIN	ATES	(M)	*			EF	Н	W
DESCRIPTION	*	X1	Y1	x2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
	_*_					<b>.</b> *.					
A. Link A	*	107	36	98	110	*	AG	1216	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	1216	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	685	9.7	.0	15.6
D. Link D	*	93	115	103	36	*	AG	685	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	1316	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	1316	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1508	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1508	9.7	.0	14.9

**III. RECEPTOR LOCATIONS** 

			*	COORD	INATES	(M)
- I	RECEPTO	DR	*	х	Y	Z
			-*			
1.	Recpt	1	*	85	121	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			c	CONC/I	INK			
	*	BRG		CONC					(PPI	(N			
RECEPTOR	*	(DEG)	*	(PPM)	*	Α	В	С	D	E	F	G	н
1. Recpt 1	*	110.	*	9.1	-*- *	.1	.5	.3	.2	.1	.7	.7	.6

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - Avenue J/15th Street RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5	M/S	Z0=	100.	CM		ALT=	0.	(M)
BRG=	WORST	CASE	VD=	.0	CM/S				
CLAS=	7	(G)	VS=	.0	CM/S				
MIXH=	1000.	M	AMB=	5.9	PPM				
SIGTH=	30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

#### II. LINK VARIABLES

LINK	*		COORDIN		(M)	*			EF	Н	W
DESCRIPTION	* *_	X1	Y1	X2	Y2	* _*.	TYPE	VPH	(G/MI)	(M)	(M)
A. Link A	*	107	36	98	110	*	AG	709	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	709	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	732	9.7	.0	15.6
D. Link D	*	93	115	103	36	*	AG	732	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	1389	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	1389	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1403	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1403	9.7	.0	14.9

III. RECEPTOR LOCATIONS

			*	COORD	(M)	
F	RECEPTO	DR	*	х	Y	Z
			_*			
1.	Recpt	1	*	85	121	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			(	CONC/I	INK			
	*	BRG	*	CONC	*				(PP				
RECEPTOR	*	(DEG)	*	(PPM)	*	A	В	С	Ď	Ê	F	G	н
1. Recpt 1	* - *	109.	*	8.8	- * - *	.0	. 3	.4	.2	.1	.7	. 6	. 6

#### CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - Avenue I/10th Street RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

U=	.5	M/S	Z0=	100.	CM		ALT=	0. (M)	)
BRG=	WORST	CASE	VD=	.0	CM/S				
CLAS=	7	(G)	VS=	.0	CM/S				
MIXH=	1000.	M	AMB=	5.9	PPM				
SIGTH=	30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

#### **II. LINK VARIABLES**

LINK	*	LINK	COORDIN	NATES	(M)	*			EF	н	W
DESCRIPTION	*	X1	Y1	x2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
	-*-					- * -					
A. Link A	*	107	36	98	110	*	AG	1014	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	1014	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	759	9.7	.0	15.6
D. Link D	*	93	115	103	36	*	AG	759	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	1263	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	1263	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1477	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1477	9.7	.0	14.9

#### **III. RECEPTOR LOCATIONS**

			*	COORD	INATES	(M)
	RECEPTO			х	Y	Z
			-*			
1.	Recpt	1	*	85	121	1.8

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			C	CONC/I	INK			
	*	DILO		CONC					(PP				
RECEPTOR	*	(DEG)	*	(PPM)	*	Α	В	С	D	E	F	G	н
	_*.		_*.		-*-								
1. Recpt 1	*	109.	*	9.0	*	.1	.5	.4	.2	.1	.6	.7	.6

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - 10th Street/Lancaster RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

U=	.5	M/S	Z0=	100.	CM		ALT=	0.	(M)
BRG=	WORST	CASE	VD=	.0	CM/S				
CLAS=	7	(G)	VS=	.0	CM/S				
MIXH=	1000.	M		5.9					
SIGTH=	30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

#### II. LINK VARIABLES

LINK	*	LINK	COORDI	NATES	(M)	*			EF	н	W
DESCRIPT		X1	Y1	x2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
	*-					_*.					
A. Link A	*	107	36	98	110	*	AG	1223	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	1223	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	774	9.7	.0	15.6
D. Link D	*	93	115	103	36	*	AG	774	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	980	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	980	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1009	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1009	9.7	.0	14.9

III. RECEPTOR LOCATIONS

			*	COORD	INATES	(M)
F	RECEPTO	DR	*	Х	Y	Z
			_*_			
1.	Recpt	1	*	85	121	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			(	CONC/I	LINK			
	*	BRG	*	CONC	*				(PPI				
RECEPTOR	*	(DEG)	*	(PPM)	*	А	В	С	D	Ē	F	G	н
	_ * .		_ * _		- * _								
1. Recpt 1	*	120.	*	8.6	*	.3	.5	.3	.3	.1	.5	.3	. 5

#### CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - Lancaster/Genoa RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

U=	.5	M/S	Z0=	100.	CM		ALT=	0.	(M)
BRG=	WORST	CASE	VD=	.0	CM/S				
CLAS=	7	(G)	VS=	.0	CM/S				
MIXH=	1000.	M	AMB=	5.9	PPM				
SIGTH=	30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

#### II. LINK VARIABLES

LINK	*	LINK	COORDIN	NATES	(M)	*			EF	н	W
DESCRIPTION	*	X1	Y1	X2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
	_*_					_*.					
A. Link A	*	107	36	98	110	*	AG	36	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	36	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	0	9.7	.0	15.6
D. Link D	*	93	115	103	36		AG	0	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	1041	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	1041	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1239	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1239	9.7	.0	14.9

#### **III. RECEPTOR LOCATIONS**

			*	COORD	INATES	(M)
F	RECEPTO	DR	*	Х	Y	Z
			-*			
1.	Recpt	1	*	85	121	1.8

### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			C	CONC/I	INK			
	*	BRG		CONC					(PP	4)			
RECEPTOR	*	(DEG)	*	(PPM)	*	Α	В	С	D	E	F	G	н
1. Recpt 1	*	239.	*	7.6	*	.0	.0	.0	.0	.6	.0	.0	1.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL JUNE 1989 VERSION PAGE 1

JOB: North Downtown - Lancaster/Fern RUN: Hour 1 (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

U=	.5	M/S	Z0=	100.	CM		ALT=	0.	(M)
BRG=	WORST	CASE	VD=	.0	CM/S				
CLAS=	7	(G)	VS=	.0	CM/S				
MIXH=	1000.	M	AMB=	5.9	PPM				
SIGTH=	30.	DEGREES	TEMP=	25.0	DEGREE	(C)			

· · ·

1

1

#### **II. LINK VARIABLES**

LINK	*	LINK	COORDI	NATES	(M)	*			EF	н	W
DESCRIPTION	*	X1	Y1	x2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
	-*-					- * .					
A. Link A	*	107	36	98	110	*	AG	195	9.7	.0	15.6
B. Link B	*	98	110	86	204	*	AG	195	9.7	.0	15.6
C. Link C	*	82	202	93	115	*	AG	489	9.7	.0	15.6
D. Link D	*	93	115	103	36	*	AG	489	9.7	.0	15.6
E. Link E	*	3	99	94	110	*	AG	1111	9.7	.0	14.9
F. Link F	*	94	110	170	119	*	AG	1111	9.7	.0	14.9
G. Link G	*	170	124	97	116	*	AG	1262	9.7	.0	14.9
H. Link H	*	97	116	3	104	*	AG	1262	9.7	.0	14.9

#### III. RECEPTOR LOCATIONS

			*	COORD	INATES	(M)
F	RECEPTO	DR	*	Х	Y	Z
			_*_			
1.	Recpt	1	*	85	121	1.8

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*		*	PRED	*			(	CONC/I	TNK			
	*			CONC					(PPI	4)			
RECEPTOR	*	(DEG)	*	(PPM)	*	A	В	С	D	Ē	F	G	Н
1. Recpt 1	*	108.	*	8.1	*	.0	.0	.2	.1	.0	.6	.6	.5

## Parenthetical URBEMIS2001 Assumptions for All Building Phases: North Downtown Neighborhood Revitalization EIR Project Date: 1/24/03

## LAND USES<sup>1</sup>

Amount	Project Land Use Type	Trip Rate	Unit Type	% Emp. Trips
68	Multifamily Residential Units	6.9	Dwelling Units	-
78.4	School	11.92	1,000 sq. ft.	20
20.3	Food Bank	9.11	1,000 sq. ft.	3
37.8	Retail	26.75	1,000 sq. ft.	2
39.4	Office	16.47	1,000 sq. ft.	35

## **CONSTRUCTION SOURCES**

## **Demolition:**

<u>Building Demolition</u>: Existing buildings on the site comprise 269,081 square feet area space. The assumed average height is 10 feet (1 story) feet high. For determining the quantity of demolished material, a model building representing the entire group of buildings is using the following equation:

- (518.7 ft. length x 10 ft. height x 4 [vertical walls])
- + (269,081 sq. ft. x 2 [floor and roof])
  - 558,910 sq. ft. of demolished building material
- x 0.75 ft. (average assumed wall thickness)
- x <u>1.25 ft. (to account for interior walls throughout)</u> 523,978 cu. ft. total demolished material (total)

<u>Parking Lot Demolition</u>: The total paved area is roughly 549,097 square feet. A deduction for existing on-site landscaping of 10% is applied to reduce this figure to 494,187.3 square feet. In order to determine the total demolished parking lots (asphalt) per phase the following equation is utilized: 494,187.3 total lot square footage x .5 ft thickness = 247,093.7 total demolished asphalt material.

## Grading:

Phase	Acres Pe	r Day Amount of Days
I (100% of site)	2.8	137 <sup>1</sup>
1 – Based on a grading perio	od of 2 quarters per ye	ear (66 working days per quarter).

## Equipment Exhaust:

- 2 Off-Highway Trucks
- 1 Scraper
- 1 Dozer
- 1 Motor Grader

8 hour operation 8 hour operation 8 hour operation 8 hour operation

## **Fugitive Dust:**

(URBEMIS2001 default all phases)

## Worker Trips:

(URBEMIS2001 default all phases)

## Asphalt:

Phase	Acres	Amount of Days
I (100% of site)	1.5	10

## Stationary Equipment:

(URBEMIS2001 default all phases)

## Mobile Equipment:

1 Fork Lift (175 HP) 1 Wheeled Tractor 1 Loader (All Phases) 8 hour operation8 hour operation8 hour operation

## Architectural Coatings (Hand Calculated as recommended BY the SCAQMD):

Off (All Phases)

VOC (pounds per day)1 =

((0.0185 pounds ROG/ft<sup>2</sup>) X (sum of building square footage x 2)

(number of days to paint + 3)

((0.0185 pounds ROG/ft<sup>2</sup>) X (253,089 x 2)

------ = 135.7 lbs/day

(66 + 3)

(Painting based on one quarter - 66 working days per quarter)

High Volume Low Pressure Application 135.7 lbs/day x 0.352 = **47.5 lbs/day** 

<sup>1 -</sup> Per Mr. Steve Smith, South Coast Air Quality Management District.

<sup>2 -</sup> Based upon SCAQMD recommendation of 64.8% efficiency for High Volume Low Spray Application (64.8% would adhere to surface area, 35.2% would be released to the atmosphere).

## Year:

Phase	Year of Completion	Working Days
I	2010	264 (assumed normal average)

## **Construction Mitigation:**

Refer to URBEMIS2001 file output.

## **AREA SOURCES**

## Natural Gas:

(URBEMIS2001 default all phases)

## Wood Stoves:

Off

## Fireplaces:

Off

## Landscape maintenance Equipment:

Phase	Year of Completion	Summer Days
I	2010	180

## **Consumer Products:**

(URBEMIS2001 default all phases)

## Mitigation:

Refer to URBEMIS2001 file output.

## **OPERATIONAL SOURCES**

## **Anticipated Fleet Mix:**

(URBEMIS2001 default all phases)

## Year:

Phase	Year of Completion
1	

## **Trip Characteristics:**

(URBEMIS2001 Default all phases)

## Temperature Data:

40 to 95 degrees Fahrenheit (All Phases)

1

. 1

## Variable Starts:

(URBEMIS2001 default all phases)

## Paved / Unpaved Roads:

100% paved (All Phases)

## Pass By Trips:

On

## **Operational Mitigation Measures:**

Refer to URBEMIS 2001 file output.

Page: 1

1

URBEMIS 2001 For Windows 6.2.2

File Name:C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North DowntProject Name:North Downtown NeighborhoodProject Location:South Coast Air Basin (Los Angeles area)

#### SUMMARY REPORT (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATE	S				
TOTALS(lbs/day,unmitigated) TOTALS (lbs/day, mitigated)	ROG 10.22 9.78	NOx 133.79 127.17	CO 1.78 1.78	PM10 39.71 19.40	SO2 15.63 14.85
AREA SOURCE EMISSION ESTIMATES					
	ROG	NOx	CO	PM10	S02
TOTALS(lbs/day,unmitigated)	3.64	2.12	2.23	0.01	0.00
TOTALS (lbs/day, mitigated)	3.64	2.12	2.23	0.01	0.00
OPERATIONAL (VEHICLE) EMISSION					
	ROG	NOx	CO	PM10	S02
TOTALS (ppd, unmitigated)	33.78	22.33	356.40	18.43	0.16
TOTALS (ppd, mitigated)	31.72	20.69	330.38	17.08	0.15

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URBEMIS 2001 For Windows 6.2.2

File Name: Project Name: Project Location:	North	C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North D North Downtown Neighborhood South Coast Air Basin (Los Angeles area)						
SUMMAR (Pounds/Da	Y REPORT ay - Wint	er)						
CONSTRUCTION EMISSION ESTIMAT	ES					V		
	ROG	NOx	CO	PM10	S02			
TOTALS(lbs/day,unmitigated)	10.22	133.79	1.78	39.71	15.63			
TOTALS (lbs/day, mitigated)	9.78	127.17	1.78	19.40	14.85			
AREA SOURCE EMISSION ESTIMATE	S							
	ROG	NOX	CO	PM10	SO2			
TOTALS(lbs/day,unmitigated)	3.48	2.09			0.00			
TOTALS (lbs/day, mitigated)	3.48	2.09	0.85	0.00	0.00			
OPERATIONAL (VEHICLE) EMISSIO	N ESTIMAT	FC				1 <sup>0,0</sup>		
OFERATIONAL (VENICLE) EMISSION	ROG	NOx	CO	PM10	SO2			
TOTALS (ppd, unmitigated)	34.36	37.76	363.71	18.43	0.13			
TOTALS (ppd, mitigated)	31.82	34.99	337.08	17.08	0.12			
ioinito (ppa, micigatea)	51.02	51.55	557.00	11.00	0.12			

.

C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North Downt File Name: North Downtown Neighborhood Project Name: Project Location: South Coast Air Basin (Los Angeles area) SUMMARY REPORT (Tons/Year) CONSTRUCTION EMISSION ESTIMATES ROG NOx CO PM10 SO2 0.23 TOTALS (tpy, unmitigated) 0.94 10.96 2.82 1.13 TOTALS (tpy, mitigated) 0.90 10.42 0.23 1.45 1.07 AREA SOURCE EMISSION ESTIMATES PM10 S02 ROG NOx CO 0.00 0.00 TOTALS (tpy, unmitigated) 0.65 0.38 0.28 TOTALS (tpy, mitigated) 0.00 0.00 0.28 0.64 0.38

PM10

3.36

3.12

SO2

0.03

0.03

OPERATIONAL (VEHICLE) EMISSION ESTIMATESROGNOxCOTOTALS (tpy, unmitigated)6.205.0165.49TOTALS (tpy, mitigated)5.794.6560.70

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URBEMIS 2001 For Windows 6.2.2

URBEMIS 2001 For Windows 6.2.2

File Name: C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North Down. Project Name: North Downtown Neighborhood Project Location: South Coast Air Basin (Los Angeles area) DETAIL REPORT (Pounds/Day - Winter) Total Land Use Area to be Developed (Estimated): 11 acres Retail/Office/Institutional Square Footage: 175900 Single Family Units: 0 Multi-family Units: 68 CONSTRUCTION EMISSION ESTIMATES 

 CONSTRUCTION EMISSION ESTIMATES

 Source
 ROG
 NOx
 CO
 PM10
 SO2

 Demolition
 0.00

 Site Grading
 5.51
 103.14
 37.25
 14.37

 Const. Worker Trips
 0.66
 0.94
 1.78
 0.18

 Stationary Equip
 0.34
 0.27
 0.02
 0.00

 Mobile Equip. - Gas
 0.00
 0.00
 0.00
 0.00

 Mobile Equip. - Diesel
 3.32
 29.44
 2.26
 1.26

 Architectural Coatings
 0.00

 Asphalt Offgassing
 0.39

 TOTALS(lbs/day,unmitigated)
 10.22
 133.79
 1.78
 39.71
 15.63

 PM10 0.00 17.05 0.18 CONSTRUCTION EMISSION ESTIMATES 
 CONSTRUCTION EMISSION ESTIMATES

 Source
 ROG
 NOx
 CO
 PM10
 SO2

 Demolition
 0.00

 Site Grading
 5.24
 97.99
 17.05
 13.65

 Const. Worker Trips
 0.66
 0.94
 1.78
 0.18

 Stationary Equip
 0.34
 0.27
 0.02
 0.00

 Mobile Equip. - Gas
 0.00
 0.00
 0.00
 0.00

 Mobile Equip. - Diesel
 3.15
 27.97
 2.15
 1.19

 Architectural Coatings
 0.00

 Asphalt Offgassing
 0.39

 TOTALS (lbs/day, mitigated)
 9.78
 127.17
 1.78
 19.40
 14.85

Construction-Related Mitigation Measures

Soil Erosion Measures: Water Exposed Surfaces 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 68% SO2 0%)
Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)
Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 3% SO2 0%)
Reduce Speeds on Unpaved Roads to 15 mph or less
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 70% SO2 0%)
Mobile Equipment: Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)

AREA SOURCE EMISSION ESTIMATES	(Winter	Pounds per	Day, Unmi	tigated)	
Source	ROG	NOx	CO	PM10	S02
Natural Gas	0.15	2.09	0.85	0.00	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emiss:	lons				
Consumer Prdcts	3.33	-	-	-	-
TOTALS(lbs/day,unmitigated)	3.48	2.09	0.85	0.00	0.00
AREA SOURCE EMISSION ESTIMATES					
Source	ROG	NOx	CO	PM10	S02
Natural Gas	0.15	2.09	0.85	0.00	_
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emiss:	Lons				
Consumer Prdcts	3.33	-	-	-	-
TOTALS (lbs/day, mitigated)	3.48	2.09	0.85	0.00	0.00

Area Source Mitigation Measures

-

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## MITIGATED OPERATIONAL EMISSIONS

1

Multifamily Junior high school Foodbank Retail Office TOTAL EMISSIONS (lbs/day)	7.95 7.39 31.82	1.91 7.62 8.79 34.99	97.02 18.18 75.67 83.14	3.50 4.41	0.01 0.02 0.03
OPERATIONAL (Vehicle) EMIS					
Analysis Year: 2010 Tempe	erature (F): 4	0 Season	: Winter		
EMFAC Version: EMFAC2001	(10/2001)				
Summary of Land Uses:					
Unit Type	Trip Ra	te		Size	Total Trips
Multifamily Junior high school Foodbank Retail Office	6.90 trips 11.92 trips 9.11 trips 26.75 trips 16.47 trips	/ 1000 sq / 1000 sq / 1000 sq	A. ft. A. ft. A. ft.	78.40 20.30 37.80	469.20 934.53 184.93 1,011.15 648.92
Vehicle Assumptions:					
Fleet Mix:					
Vehicle Type Light Auto Light Truck < 3,750 lbs Light Truck 3,751- 5,750 Med Truck 5,751- 8,500 Lite-Heavy 8,501-10,000 Lite-Heavy 10,001-14,000 Med-Heavy 14,001-33,000 Heavy-Heavy 33,001-60,000 Line Haul > 60,000 lbs Urban Bus Motorcycle School Bus Motor Home	16.70 7.20 1.10 0.30	4.70 11.00 1.80 12.50 18.20 0.00 9.10 0.00 0.00 9.00 0.00 90.90 0.00	) ) ) ) ) ) )	Catalyst 94.50 88.90 97.60 79.20 72.70 66.70 27.30 0.00 0.00 0.00 9.10 0.00 100.00	
Travel Conditions	Reside	ntial		Commer	cial
Urban Trip Length (miles) Rural Trip Length (miles) Trip Speeds (mph) % of Trips - Residential % of Trips - Commercial (k Junior high school Foodbank Retail	Home-HomWorkSho11.54.35.040.20.037.	e- Hom p Oth 9 6. 9 6. 0 40.	er Commu 0 10. 0 10. 0 40. 0 20. 3.	ute Non-W .3 5 .3 5 .0 40 .0 10 .0 1	ork Customer .5 5.5 .5 5.5 .0 40.0 .0 70.0 .5 95.5 .0 97.0

Page: 9 Office 35.0 17.5 47.5

D

0

#### ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

#### Pedestrian Environment

3.0	Side Walks/Paths: Complete Coverage
0.5	Street Trees Provide Shade: Some Coverage
2.0	Pedestrian Circulation Access: Some Destinations
3.0	Visually Interesting Uses: Moderate Number and Variety
1.0	Street System Enhances Safety: Some Streets
0.5	Pedestrian Safety from Crime: Some Degree of Safety
0.0	Visually Interesting Walking Routes: No Visual Interest

1

- 10.0 <- Pedestrian Environmental Credit
- 10.0 /19 = 0.5 <- Pedestrian Effectiveness Factor
- Transit Service
- 40.0 Transit Service: Light Rail/Trolley w/in 1/2 mile
- 40.0 <- Transit Effectiveness Credit
- 10.0 <- Pedestrian Factor
- 50.0 <-Total
- 50.0 /110 = 0.5 <-Transit Effectiveness Factor

#### Bicycle Environment

1.0	Interconnected Bikeways: Low Coverage
1.0	Bike Routes Provide Paved Shoulders: Few Routes
0.0	Safe Vehicle Speed Limits: No Routes Provided
0.0	Safe School Routes: No Schools
0.0	Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0	Bike Parking Ordinance: No Ordinance or Unenforceable
2.0	<- Bike Environmental Credit

2.0 /20 = 0.1 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT (All mitigation measures are printed, even if the selected land uses do not constitute a mixed use.) Transit Infrastructure Measures % Trips Reduced Measure 15.0 Credit for Existing or Planned Community Transit Service 15.0 <- Totals Pedestrian Enhancing Infrastructure Measures (Residential) % Trips Reduced Measure 2.0 Credit for Surrounding Pedestrian Environment 1.0 Provide Sidewalks and/or Pedestrian Paths 0.5 Provide Street Lighting 0.5 Provide Pedestrian Signalization and Signage 4.0 <- Totals Pedestrian Enhancing Infrastructure Measures (Non-Residential) % Trips Reduced Measure 2.0 Credit for Surrounding Pedestrian Environment 0.5 Provide Street Lighting 0.3 No Long Uninterrupted Walls Along Pedestrian Walkways 2.8 <- Totals Bicycle Enhancing Infratructure Measures (Residential) % Trips Reduced Measure 7.0 Credit for Surrounding Bicycle Environment 7.0 <- Totals Bike Enhancing Infrastructure Measures (Non-Residential) 1% Trips Reduced Measure 5.0 Credit for Surrounding Area Bike Environment 5.0 <- Totals Operational Measures (Applying to Commute Trips) % Trips Reduced Measure 0.0 <- Totals Operational Measures (Applying to Employee Non-Commute Trips) % Trips Reduced Measure 0.0 <- Totals Operational Measures (Applying to Customer Trips) % Trips Reduced Measure 0.0 <- Totals Measures Reducing VMT (Non-Residential) 'VMT Reduced Measure 0.0 Park and Ride Lots 0.0 <- Totals Measures Reducing VMT (Residential)

VMT Reduced Measure 0.0 <- Totals

		ntage Trip Reduct	
with	Environmental F	actors and Mitiga	ation Measures
Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.23	0.93	0.93
Transit	6.82	1.50	1.84
Bicycle	0.70	0.70	0.70
Totals	0.00	0.00	0.00
Travel Mode	Work Trips Em	ployee Trips	Customer Trips
Pedestrian	0.16	1.45	1.45
Transit	6.82	0.14	6.82
Bicycle	0.50	0.50	0.50
Other	0.00	0.00	0.00
Totals	0.00	0.00	0.00

Changes made to the default values for Construction The architectural coating option switch changed from on to off. The construction year changed from 2002 to 2007. The length of construction period changed from 250 to 264. The demolition total width in total volume changed from to 5.95. The demolition total length in total volume changed from to 10. The demolition total height in total volume changed from to 10. The demolition total width in maximum daily volume changed from to .9. The demolition total length in maximum daily volume changed from to 1. The demolition total height in maximum daily volume changed from to 10. The demolition days required changed from 10 to 66. The site grading max daily acreage estimate changed from to 2.8. The site grading annual days earth moving changed from 250 to 134. The site grading truck: off hwy total vehicles changed from to 2. The site grading scraper total vehicles changed from to 1. The site grading wheeled dozer total vehicles changed from to 1. The site grading motor grader total vehicles changed from to 1. The asphalt acres to be paved changed from 1 to 1.5. The mobile diesel fork lift 175 HP total vehicles changed from to 1. The mobile diesel wheeled tractor total vehicles changed from to 1. The mobile diesel roller total vehicles changed from to 1. Mitigation measure Soil Erosion Measures: Water Exposed Surfaces 2x Per Day:0 has been changed from off to on. Mitigation measure Properly Maintain Equipment: 5 has been changed from off to on. Mitigation measure Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day:0 has been changed from off to on. Mitigation measure Reduce Speeds on Unpaved Roads to 15 mph or less: 0 has been changed from off to on. Mitigation measure Mobile Equipment: Properly Maintain Equipment: 5 has been changed from off to on. Changes made to the default values for Area The wood stove option switch changed from on to off. The fireplcase option switch changed from on to off. The landscape year changed from 2002 to 2010. Changes made to the default values for Operations The double counting option switch changed from off to on. The operational emission year changed from 2002 to 2010. The operational winter temperature changed from 50 to 40. The operational winter selection item changed from 3 to 1. The operational summer temperature changed from 90 to 95. The double counting internal work trip limit changed from to 93.84. The double counting shopping trip limit changed from to 173.604. The double counting other trip limit changed from to 201.756. The travel mode environment settings changed from both to: both The default/nodefault travel setting changed from nodefault to: nodefault Side Walks/Paths: No Sidewalks changed to: Side Walks/Paths: Complete Coverage Street Trees Provide Shade: No Coverage changed to:Street Trees Provide Shade: Some Coverage Pedestrian Circulation Access: No Destinations changed to: Pedestrian Circulation Access: Some Destinations Visually Interesting Uses: No Uses Within Walking Distance changed to: Visually Interesting Uses: Moderate Number and Variety Street System Enhances Safety: No Streets changed to: Street System Enhances Safety: Some Streets Pedestrian Safety from Crime: No Degree of Safety

changed to: Pedestrian Safety from Crime: Some Degree of Safety Transit Service: Dial-A-Ride or No Transit Service changed to: Transit Service: Light Rail/Trolley w/in 1/2 mile Interconnected Bikeways: No Bikeway Coverage changed to: Interconnected Bikeways: Low Coverage Bike Routes Provide Paved Shoulders: No Routes changed to: Bike Routes Provide Paved Shoulders: Few Routes Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure Provide Pedestrian Signalization and Signage:0.5 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25 has been changed from off to on.

URBEMIS 2001 For Windows 6.2.2

File Name: Project Name: Project Location: C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North Downe North Downtown Neighborhood South Coast Air Basin (Los Angeles area)

DETAIL REPORT (Pounds/Day - Summer)

Total Land Use Area to be Developed (Estimated): 11 acres Retail/Office/Institutional Square Footage: 175900 Single Family Units: 0 Multi-family Units: 68

CONSTRUCTION EMISSION ESTIMAT	ES				
Source	ROG	NOx	CO	PM10	SO2
Demolition	-	-	-	0.00	-
Site Grading	5.51	103.14	-	37.25	14.37
Const. Worker Trips	0.66	0.94	1.78	0.18	
Stationary Equip	0.34	0.27	-	0.02	0.00
Mobile Equip Gas	0.00	0.00	-	0.00	0.00
Mobile Equip Diesel	3.32	29.44	-	2.26	1.26
Architectural Coatings	0.00	-	-	-	_
Asphalt Offgassing	0.39	-	-	-	_
TOTALS(lbs/day,unmitigated)	10.22	133.79	1.78	39.71	15.63
CONSTRUCTION EMISSION ESTIMAT					
Source	ES ROG	NOx	CO	PM10	S02
Source Demolition	ROG	-	CO _	0.00	-
Source Demolition Site Grading		NOx - 97.99	C0 		SO2 - 13.65
Source Demolition	ROG - 5.24 0.66	-	CO  1.78	0.00	-
Source Demolition Site Grading Const. Worker Trips Stationary Equip	ROG - 5.24	97.99	_	0.00 17.05	-
Source Demolition Site Grading Const. Worker Trips	ROG - 5.24 0.66	97.99 0.94	_	0.00 17.05 0.18	13.65
Source Demolition Site Grading Const. Worker Trips Stationary Equip	ROG - 5.24 0.66 0.34	97.99 0.94 0.27	_	0.00 17.05 0.18 0.02	13.65 0.00
Source Demolition Site Grading Const. Worker Trips Stationary Equip Mobile Equip Gas Mobile Equip Diesel Architectural Coatings	ROG 5.24 0.66 0.34 0.00	97.99 0.94 0.27 0.00	_	0.00 17.05 0.18 0.02 0.00	13.65 0.00 0.00
Source Demolition Site Grading Const. Worker Trips Stationary Equip Mobile Equip Gas Mobile Equip Diesel	ROG 5.24 0.66 0.34 0.00 3.15	97.99 0.94 0.27 0.00	_	0.00 17.05 0.18 0.02 0.00	13.65 0.00 0.00 1.19
Source Demolition Site Grading Const. Worker Trips Stationary Equip Mobile Equip Gas Mobile Equip Diesel Architectural Coatings	ROG 5.24 0.66 0.34 0.00 3.15 0.00	97.99 0.94 0.27 0.00	_	0.00 17.05 0.18 0.02 0.00	13.65 0.00 0.00

#### Construction-Related Mitigation Measures

Soil Erosion Measures: Water Exposed Surfaces 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 68% SO2 0%)
Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)
Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 3% SO2 0%)
Reduce Speeds on Unpaved Roads to 15 mph or less
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 70% SO2 0%)
Mobile Equipment: Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)

1

1

AREA SOURCE EMISSION ESTIMATES Source Natural Gas	(Summer ROG 0.15	Pounds per NOx 2.09	Day, Unmi CO 0.85	tigated) PM10 0.00	S02
Wood Stoves - No summer emiss	ions				
Fireplaces - No summer emissi	ons				
Landscaping	0.16	0.03	1.38	0.00	0.00
Consumer Prdcts	3.33	-	-	-	-
TOTALS(lbs/day,unmitigated)	3.64	2.12	2.23	0.01	0.00
AREA SOURCE EMISSION ESTIMATES					
Source	ROG	NOx	CO	PM10	S02
Natural Gas	0.15	2.09	0.85	0.00	-
Wood Stoves - No summer emiss	ions				
Fireplaces - No summer emissi	ons				
Landscaping	0.16	0.03	1.38	0.00	0.00
Consumer Prdcts	3.33	-	-	-	-
TOTALS (lbs/day, mitigated)	3.64	2.12	2.23	0.01	0.00
Area Source Mitigation Measure	9				
	0				

UNMITIGATED OPERATIONAL EMISSIONS

Multifamily Junior high school Foodbank Retail Office	7.85		66. 103. 19. 77.	28 30 29		0.03
TOTAL EMISSIONS (lbs/day)	33.78	22.33	356.	40 1	8.43	0.16
Includes correction for pa Includes a double counting			nal trip	DS.		
OPERATIONAL (Vehicle) EMIS	SSION ESTIMA	ATES				
Analysis Year: 2010 Tempe	erature (F):	: 95 Sea	ison: Sun	mer		
EMFAC Version: EMFAC2001	(10/2001)					
Summary of Land Uses:						
Unit Type	Trip	Rate		S	Size	Total Trips
Multifamily Junior high school Foodbank Retail Office	9.11 tri 26.75 tri	ips / dwel ips / 1000 ips / 1000 ips / 1000 ips / 1000	) sq. ft. ) sq. ft. ) sq. ft.	C 1	78.40 20.30	934.53 184.93 1,011.15
Vehicle Assumptions:						
Fleet Mix:						
Vehicle Type Light Auto Light Truck < 3,750 lbs Light Truck 3,751- 5,750 Med Truck 5,751- 8,500 Lite-Heavy 8,501-10,000 Lite-Heavy 10,001-14,000 Med-Heavy 14,001-33,000 Heavy-Heavy 33,001-60,000 Line Haul > 60,000 lbs Urban Bus Motorcycle School Bus Motor Home	16.70 7.20 1.10		Catalyst .70 .80 .50 .20 .00 .10 .00 .00 .00 .00 .00 .00 .00 .0	94 88 97 72 66 27 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lyst .50 .90 .20 .20 .70 .30 .00 .00 .00 .00 .00 .00	Diesel 0.80 0.10 0.60 8.30 9.10 33.30 63.60 100.00 100.00 100.00 100.00 0.00
Travel Conditions	Resi	dential			Commerc	cial
Urban Trip Length (miles) Rural Trip Length (miles) Trip Speeds (mph) % of Trips - Residential	Home- H Work S 11.5 11.5 35.0 4	Home- Shop 4.9 4.9 40.0 37.0	Home- Other 6.0 6.0 40.0 43.0	Commute 10.3 10.3 40.0	Non-Wo 5	ork Customer .5 5.5 .5 5.5

1

% of Trips - Commercial (by land use)

Junior high school	20.0	10.0	70.0
Foodbank	3.0	1.5	95.5
Retail	2.0	1.0	97.0
Office	35.0	17.5	47.5

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MITIGATED OPERATIONAL EMISSIONS

Multifamily Junior high school Foodbank Retail Office		5.97 1.13 4.59			SO2 0.03 0.04 0.01 0.03 0.04
TOTAL EMISSIONS (lbs/day)	31.72	20.69	330.38	17.08	0.15
OPERATIONAL (Vehicle) EMIS	SSION ESTIMA	TES			
Analysis Year: 2010 Tempe	erature (F):	95 Season	: Summer		
EMFAC Version: EMFAC2001	(10/2001)				
Summary of Land Uses:					
Unit Type	Trip	Rate		Size To	tal Trips
Multifamily Junior high school Foodbank Retail Office	11.92 tri 9.11 tri 26.75 tri	ps / dwellin ps / 1000 sq ps / 1000 sq ps / 1000 sq ps / 1000 sq	1. ft. 1. ft.	68.00 78.40 20.30 37.80 39.40	469.20 934.53 184.93 1,011.15 648.92
Vehicle Assumptions:					
Fleet Mix:					
Vehicle Type Light Auto Light Truck < 3,750 lbs Light Truck 3,751- 5,750 Med Truck 5,751- 8,500 Lite-Heavy 8,501-10,000 Lite-Heavy 10,001-14,000 Med-Heavy 14,001-33,000 Heavy-Heavy 33,001-60,000 Line Haul > 60,000 lbs Urban Bus Motorcycle School Bus Motor Home	16.70 7.20 1.10 0.30	Non-Cata 4.70 11.00 1.80 12.50 18.20 0.00 9.10 0.00 0.00 90.90 0.00	) - 9 ) 8 ) 7 ) 7 ) 7 ( ) 7 ) 7 ( ) 7 ) 7 ( ) 7 ) 7 ( ) 7 ) 7 ( ) 7 ) 7 ( ) 7 ) 7 ) 7 ) 7 ) 7 ) 7 ) 7 ) 7	alyst 4.50 8.90 7.60 9.20 2.70 66.70 7.30 0.00 0.00 9.10 0.00 9.10 0.00	Diesel 0.80 0.10 0.60 8.30 9.10 33.30 63.60 100.00 100.00 100.00 100.00 0.00
Travel Conditions	Resi	dential		Commercia	1
Urban Trip Length (miles) Rural Trip Length (miles) Trip Speeds (mph) % of Trips - Residential % of Trips - Commercial (M Junior high school Foodbank Retail	Home- H Work S 11.5 11.5 35.0 4 20.0 3	Iome-         Hom           6hop         Oth           4.9         6.           4.9         6.           0.0         40.           97.0         43.	ler Commute 0 10.3 0 10.3 0 40.0	Non-Work 5.5 5.5 40.0	Customer 5.5 5.5 40.0 70.0

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Office

#### ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

#### Pedestrian Environment

3.0	Side Walks/Paths: Complete Coverage
0.5	Street Trees Provide Shade: Some Coverage
2.0	Pedestrian Circulation Access: Some Destinations
3.0	Visually Interesting Uses: Moderate Number and Variety
1.0	Street System Enhances Safety: Some Streets
0.5	Pedestrian Safety from Crime: Some Degree of Safety
0.0	Visually Interesting Walking Routes: No Visual Interest

- 10.0 <- Pedestrian Environmental Credit
- 10.0 /19 = 0.5 <- Pedestrian Effectiveness Factor
- Transit Service
- 40.0 Transit Service: Light Rail/Trolley w/in 1/2 mile
- 40.0 <- Transit Effectiveness Credit
- 10.0 <- Pedestrian Factor
- 50.0 <-Total
- 50.0 /110 = 0.5 <-Transit Effectiveness Factor

#### Bicycle Environment

1.0	Interconnected Bikeways: Low Coverage Bike Routes Provide Paved Shoulders: Few Routes
0.0	Safe Vehicle Speed Limits: No Routes Provided
0.0	Safe School Routes: No Schools
0.0	Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0	Bike Parking Ordinance: No Ordinance or Unenforceable
2 0	<- Biko Environmental Credit

[]

2.0 <- Bike Environmental Credit

2.0 /20 = 0.1 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT (All mitigation measures are printed, even if the selected land uses do not constitute a mixed use.) Transit Infrastructure Measures % Trips Reduced Measure 15.0 Credit for Existing or Planned Community Transit Service 15.0 <- Totals Pedestrian Enhancing Infrastructure Measures (Residential) % Trips Reduced Measure 2.0 Credit for Surrounding Pedestrian Environment 1.0 Provide Sidewalks and/or Pedestrian Paths 0.5 Provide Street Lighting 0.5 Provide Pedestrian Signalization and Signage <- Totals 4.0 Pedestrian Enhancing Infrastructure Measures (Non-Residential) % Trips Reduced Measure 2.0 Credit for Surrounding Pedestrian Environment 0.5 Provide Street Lighting 0.3 No Long Uninterrupted Walls Along Pedestrian Walkways 2.8 <- Totals Bicycle Enhancing Infratructure Measures (Residential) % Trips Reduced Measure 7.0 Credit for Surrounding Bicycle Environment 7.0 <- Totals Bike Enhancing Infrastructure Measures (Non-Residential) % Trips Reduced Measure 5.0 Credit for Surrounding Area Bike Environment 5.0 <- Totals Operational Measures (Applying to Commute Trips) % Trips Reduced Measure 0.0 <- Totals Operational Measures (Applying to Employee Non-Commute Trips) % Trips Reduced Measure 0.0 <- Totals Operational Measures (Applying to Customer Trips) % Trips Reduced Measure 0.0 <- Totals Measures Reducing VMT (Non-Residential) VMT Reduced Measure 0.0 Park and Ride Lots 0.0 <- Totals Measures Reducing VMT (Residential)

VMT Reduced Measure 0.0 <- Totals

Total Percentage Trip Reduction with Environmental Factors and Mitigation Measures Travel Mode Home-Work Trips Home-Shop Trips Home-Other Trips Pedestrian 0.93 0.23 0.93 6.82 1.50 Transit 1.84 Bicycle 0.70 0.70 0.70 0.00 Totals 0.00 0.00 Travel ModeWork TripsEmployee TripsCustomer TripsPedestrian0.161.451.45Iransit6.820.146.82 6.82 Transit 0.14 6.82 Bicycle 0.50 0.50 0.50 Other 0.00 0.00 0.00 Totals 0.00 0.00 0.00

Changes made to the default values for Construction The architectural coating option switch changed from on to off. The construction year changed from 2002 to 2007. The length of construction period changed from 250 to 264. The demolition total width in total volume changed from to 5.95. The demolition total length in total volume changed from to 10. The demolition total height in total volume changed from to 10. The demolition total width in maximum daily volume changed from to .9. The demolition total length in maximum daily volume changed from to 1. The demolition total height in maximum daily volume changed from to 10. The demolition days required changed from 10 to 66. The site grading max daily acreage estimate changed from to 2.8. The site grading annual days earth moving changed from 250 to 134. The site grading truck: off hwy total vehicles changed from to 2. The site grading scraper total vehicles changed from to 1. The site grading wheeled dozer total vehicles changed from to 1. The site grading motor grader total vehicles changed from to 1. The asphalt acres to be paved changed from 1 to 1.5. The mobile diesel fork lift 175 HP total vehicles changed from to 1. The mobile diesel wheeled tractor total vehicles changed from to 1. The mobile diesel roller total vehicles changed from to 1. Mitigation measure Soil Erosion Measures: Water Exposed Surfaces 2x Per Day:0 has been changed from off to on. Mitigation measure Properly Maintain Equipment: 5 has been changed from off to on. Mitigation measure Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day:0 has been changed from off to on. Mitigation measure Reduce Speeds on Unpaved Roads to 15 mph or less: 0 has been changed from off to on. Mitigation measure Mobile Equipment: Properly Maintain Equipment: 5 has been changed from off to on. Changes made to the default values for Area The wood stove option switch changed from on to off. The fireplcase option switch changed from on to off. The landscape year changed from 2002 to 2010. Changes made to the default values for Operations The double counting option switch changed from off to on. The operational emission year changed from 2002 to 2010. The operational winter temperature changed from 50 to 40. The operational winter selection item changed from 3 to 1. The operational summer temperature changed from 90 to 95. The double counting internal work trip limit changed from to 93.84. The double counting shopping trip limit changed from to 173.604. The double counting other trip limit changed from to 201.756. The travel mode environment settings changed from both to: both The default/nodefault travel setting changed from nodefault to: nodefault Side Walks/Paths: No Sidewalks changed to: Side Walks/Paths: Complete Coverage Street Trees Provide Shade: No Coverage changed to:Street Trees Provide Shade: Some Coverage Pedestrian Circulation Access: No Destinations changed to: Pedestrian Circulation Access: Some Destinations Visually Interesting Uses: No Uses Within Walking Distance changed to: Visually Interesting Uses: Moderate Number and Variety Street System Enhances Safety: No Streets changed to: Street System Enhances Safety: Some Streets Pedestrian Safety from Crime: No Degree of Safety

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changed to: Pedestrian Safety from Crime: Some Degree of Safety Transit Service: Dial-A-Ride or No Transit Service changed to: Transit Service: Light Rail/Trolley w/in 1/2 mile Interconnected Bikeways: No Bikeway Coverage changed to: Interconnected Bikeways: Low Coverage Bike Routes Provide Paved Shoulders: No Routes changed to: Bike Routes Provide Paved Shoulders: Few Routes Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure Provide Pedestrian Signalization and Signage:0.5 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25 has been changed from off to on.

URBEMIS 2001 For Windows 6.2.2

File Name: Project Name: Project Location: C:\Program Files\URBEMIS 2001 For Windows\Projects2k\North Downt North Downtown Neighborhood South Coast Air Basin (Los Angeles area)

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#### DETAIL REPORT (Tons/Year)

Total Land Use Area to be Developed (Estimated): 11 acres Retail/Office/Institutional Square Footage: 175900 Single Family Units: 0 Multi-family Units: 68

CONSTRUCTION EMISSION ESTIMAT	ES				
Source	ROG	NOx	CO	PM10	S02
Demolition	-	-	-	0.00	-
Site Grading	0.37	6.91	_	2.50	0.96
Const. Worker Trips	0.09	0.12	0.23	0.02	-
Stationary Equip	0.04	0.04	_	0.00	0.00
Mobile Equip Gas	0.00	0.00	-	0.00	0.00
Mobile Equip Diesel	0.44	3.89	-	0.30	0.17
Architectural Coatings	0.00	-	-	-	2 <u>-</u> 4
Asphalt Offgassing	0.00	-	-	-	
TOTALS (tpy, unmitigated)	0.94	10.96	0.23	2.82	1.13
CONSTRUCTION EMISSION ESTIMAT	ES				
Source	ROG	NOx	CO	PM10	S02
Demolition	-	-	-	0.00	-
Site Grading	0.35	6.57	-	1.14	0.91
Const. Worker Trips	0.09	0.12	0.23	0.02	-
Stationary Equip	0.04	0.04	-	0.00	0.00
Mobile Equip Gas	0.00	0.00	-	0.00	0.00
Mobile Equip Diesel	0.42	3.69	-	0.28	0.16
Architectural Coatings	0.00	-	-	-	-
Asphalt Offgassing	0.00	-	-	-	-
TOTALS (tpy, mitigated)	0.90				

#### Construction-Related Mitigation Measures

Soil Erosion Measures: Water Exposed Surfaces 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 68% SO2 0%)
Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)
Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 3% SO2 0%)
Reduce Speeds on Unpaved Roads to 15 mph or less
Percent Reduction(ROG 0% NOx 0% CO 0% PM10 70% SO2 0%)
Mobile Equipment: Properly Maintain Equipment
Percent Reduction(ROG 5% NOx 5% CO 5% PM10 5% SO2 5%)

AREA SOURCE EMISSION ESTIMATES					
Source	ROG	NOx	CO	PM10	S02
Natural Gas	0.03	0.38	0.16	0.00	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.12	0.00	0.00
Consumer Prdcts	0.61	-	-	-	-
TOTALS (tpy, unmitigated)	0.65	0.38	0.28	0.00	0.00
AREA SOURCE EMISSION ESTIMATES					
Source	ROG	NOx	CO	PM10	SO2
Natural Gas	0.03	0.38	0.16	0.00	-
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.12	0.00	0.00
Consumer Prdcts	0.61	-	-	-	-
TOTALS (tpy, mitigated)	0.64	0.38	0.28	0.00	0.00

Area Source Mitigation Measures

UNMITIGATED OPERATIONAL EMISSIONS

Multifamily Junior high school Foodbank Retail Office	0.35	1.45 1 0.28 1.12 1	12.11 0 18.97 0 3.56 0 14.44 0	).64 ).98 ).19 ).70	SO2 0.01 0.01 0.00 0.01 0.01
TOTAL EMISSIONS (tons/year	) 6.20	5.01 6	55.49 3	3.36	0.03
Includes correction for pa Includes a double counting		internal tr	rips.		
OPERATIONAL (Vehicle) EMIS	SION ESTIMATES	5			
Analysis Year: 2010 Tempe	rature (F): 95	Season: A	Annual		
EMFAC Version: EMFAC2001 (	10/2001)				
Summary of Land Uses:					
Unit Type	Trip Rat	e	Si	ize Tot	al Trips
Multifamily Junior high school Foodbank Retail Office	6.90 trips 11.92 trips 9.11 trips 26.75 trips 16.47 trips	/ 1000 sq. f / 1000 sq. f / 1000 sq. f	Et. 7 Et. 2 Et. 3	58.00 78.40 20.30 37.80 39.40	469.20 934.53 184.93 1,011.15 648.92
Vehicle Assumptions:					
Fleet Mix:					
Vehicle Type P Light Auto Light Truck < 3,750 lbs Light Truck 3,751- 5,750 Med Truck 5,751- 8,500 Lite-Heavy 8,501-10,000 Lite-Heavy 10,001-14,000 Med-Heavy 14,001-33,000 Heavy-Heavy 33,001-60,000 Line Haul > 60,000 lbs Urban Bus Motorcycle School Bus Motor Home	61.40 9.30 16.70 7.20 1.10 0.30 1.10	Non-Catalys 4.70 11.00 1.80 12.50 18.20 0.00 9.10 0.00 0.00 0.00 90.90 0.00 0.0	88. 97. 79. 72. 66. 27. 0. 0. 0. 9.	.50 .90 .20 .70 .70 .30 .00 .00 .00 .10	Diesel 0.80 0.10 0.60 8.30 9.10 33.30 63.60 100.00 100.00 100.00 100.00 0.00
Travel Conditions	Residen	tial	c	Commercial	
Urban Trip Length (miles) Rural Trip Length (miles)	Home-         Home           Work         Shop           11.5         4.9           11.5         4.9           35.0         40.0	Home- Other 0 6.0 0 6.0 40.0			

% of Trips - Commercial (by land use)

Page: 31

Junior high school Foodbank Retail Office	20.0 3.0 2.0 35.0	10.0 1.5 1.0 17.5	70.0 95.5 97.0 47.5

-

MITIGATED OPERATIONAL EMISSIONS

Multifamily Junior high school Foodbank Retail Office TOTAL EMISSIONS (tons/year) OPERATIONAL (Vehicle) EMISS		1.02 1.16 4.65	CO 11.53 17.49 3.25 13.19 15.23 60.70	0.80	SO2 0.00 0.01 0.00 0.01 0.01 0.03
			7		
Analysis Year: 2010 Temper		Season:	Annual		
EMFAC Version: EMFAC2001 (1	0/2001)				
Summary of Land Uses:					
Unit Type	Trip Rat				otal Trips
Multifamily Junior high school Foodbank Retail Office	6.90 trips 11.92 trips 9.11 trips 26.75 trips 16.47 trips	/ 1000 sq. / 1000 sq. / 1000 sq.	ft. ft. ft.	68.00 78.40 20.30 37.80 39.40	469.20 934.53 184.93 1,011.15 648.92
Vehicle Assumptions:					
Fleet Mix:					
Light Auto Light Truck < 3,750 lbs Light Truck 3,751- 5,750 Med Truck 5,751- 8,500	rcent Type 61.40 9.30 16.70 7.20 1.10 0.30 1.10 0.70 0.00 0.00 1.40 0.10 0.70	Non-Catal 4.70 11.00 1.80 12.50 18.20 0.00 9.10 0.00 0.00 0.00 0.00 0.00 0.0	8 9 7 6 2	alyst 4.50 8.90 7.60 9.20 2.70 6.70 7.30 0.00 0.00 9.10 0.00 9.10 0.00	Diesel 0.80 0.10 0.60 8.30 9.10 33.30 63.60 100.00 100.00 100.00 100.00 0.00
Travel Conditions	Resider	x+i - 1		Commerci	- 1
	ome-         Home           ork         Shop           1.5         4.9           1.5         4.9           5.0         40.0	e-         Home           0         Othe           0         6.0           0         6.0           0         40.0	r Commute 10.3 10.3 40.0	Non-Wor 5.5	k Customer 5.5 5.5
% of Trips - Commercial (by Junior high school Foodbank Retail	land use)	-	20.0 3.0 2.0	10.0 1.5 1.0	95.5

2age: 33 Office 35.0 17.5 47.5 -

### ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

#### Pedestrian Environment

3.0	Side Walks/Paths: Complete Coverage
0.5	Street Trees Provide Shade: Some Coverage
2.0	Pedestrian Circulation Access: Some Destinations
3.0	Visually Interesting Uses: Moderate Number and Variety
1.0	Street System Enhances Safety: Some Streets
0.5	Pedestrian Safety from Crime: Some Degree of Safety
0.0	Visually Interesting Walking Routes: No Visual Interest
10.0	<- Pedestrian Environmental Credit
10.0	<pre>/19 = 0.5 &lt;- Pedestrian Effectiveness Factor</pre>

11

Transit Service

40.0 Transit Service: Light Rail/Trolley w/in 1/2 mile

- 40.0 <- Transit Effectiveness Credit
- 10.0 <- Pedestrian Factor
- 50.0 <-Total

/110 = 0.5 <-Transit Effectiveness Factor</pre> 50.0

Bicycle Environment

1.0 1.0	Interconnected Bikeways: Low Coverage Bike Routes Provide Paved Shoulders: Few Routes
0.0	Safe Vehicle Speed Limits: No Routes Provided
0.0	Safe School Routes: No Schools
0.0	Uses w/in Cycling Distance: No Uses w/in Cycling Distance
0.0	Bike Parking Ordinance: No Ordinance or Unenforceable
2 0	<- Bike Environmental Credit

2.0 <- Bike Environmental Credit
2.0 /20 = 0.1 <- Bike Effectiveness Factor</pre>

```
MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)
Transit Infrastructure Measures
% Trips Reduced
                           Measure
15.0
     Credit for Existing or Planned Community Transit Service
15.0
      <- Totals
Pedestrian Enhancing Infrastructure Measures (Residential)
% Trips Reduced
                           Measure
2.0
               Credit for Surrounding Pedestrian Environment
 1.0
               Provide Sidewalks and/or Pedestrian Paths
0.5
               Provide Street Lighting
 0.5
               Provide Pedestrian Signalization and Signage
4.0
      <- Totals
Pedestrian Enhancing Infrastructure Measures (Non-Residential)
% Trips Reduced
                           Measure
 2.0
               Credit for Surrounding Pedestrian Environment
 0.5
               Provide Street Lighting
 0.3
               No Long Uninterrupted Walls Along Pedestrian Walkways
 2.8 <- Totals
Bicycle Enhancing Infratructure Measures (Residential)
% Trips Reduced
                           Measure
 7.0
               Credit for Surrounding Bicycle Environment
 7.0
       <- Totals
Bike Enhancing Infrastructure Measures (Non-Residential)
% Trips Reduced
                           Measure
5.0
               Credit for Surrounding Area Bike Environment
 5.0
      <- Totals
Operational Measures (Applying to Commute Trips)
% Trips Reduced
                           Measure
0.0 <- Totals
Operational Measures (Applying to Employee Non-Commute Trips)
% Trips Reduced
                           Measure
0.0
      <- Totals
Operational Measures (Applying to Customer Trips)
% Trips Reduced
                           Measure
0.0
     <- Totals
Measures Reducing VMT (Non-Residential)
VMT Reduced
                       Measure
       0.0
                     Park and Ride Lots
       0.0
            <- Totals
Measures Reducing VMT (Residential)
```

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VMT Reduced Measure 0.0 <- Totals

-

Page: 37	
wit Travel Mode Pedestrian Transit Bicycle Totals Travel Mode Pedestrian Transit Bicycle Other Totals	Total Percentage Trip Reduction n Environmental Factors and Mitigation Measures Home-Work Trips Home-Shop Trips Home-Other Trips 0.23 0.93 0.93 6.82 1.50 1.84 0.70 0.70 0.70 0.70 0.00 0.00 0.00 Work Trips Employee Trips Customer Trips 0.16 1.45 1.45 6.82 0.14 6.82 0.50 0.50 0.50 0.00 0.00 0.00
0	
3	
0	
8	
0	

-

Changes made to the default values for Construction The architectural coating option switch changed from on to off. The construction year changed from 2002 to 2007. The length of construction period changed from 250 to 264. The demolition total width in total volume changed from to 5.95. The demolition total length in total volume changed from to 10. The demolition total height in total volume changed from to 10. The demolition total width in maximum daily volume changed from to .9. The demolition total length in maximum daily volume changed from to 1. The demolition total height in maximum daily volume changed from to 10. The demolition days required changed from 10 to 66. The site grading max daily acreage estimate changed from to 2.8. The site grading annual days earth moving changed from 250 to 134. The site grading truck: off hwy total vehicles changed from to 2. The site grading scraper total vehicles changed from to 1. The site grading wheeled dozer total vehicles changed from to 1. The site grading motor grader total vehicles changed from to 1. The asphalt acres to be paved changed from 1 to 1.5. The mobile diesel fork lift 175 HP total vehicles changed from to 1. The mobile diesel wheeled tractor total vehicles changed from to 1. The mobile diesel roller total vehicles changed from to 1. Mitigation measure Soil Erosion Measures: Water Exposed Surfaces 2x Per Day:0 has been changed from off to on. Mitigation measure Properly Maintain Equipment: 5 has been changed from off to on. Mitigation measure Implement Water/Paved Road Measures: Water All Haul Roads 2x Per Day:0 has been changed from off to on. Mitigation measure Reduce Speeds on Unpaved Roads to 15 mph or less: 0 has been changed from off to on. Mitigation measure Mobile Equipment: Properly Maintain Equipment: 5 has been changed from off to on. Changes made to the default values for Area The wood stove option switch changed from on to off. The fireplcase option switch changed from on to off. The landscape year changed from 2002 to 2010. Changes made to the default values for Operations The double counting option switch changed from off to on. The operational emission year changed from 2002 to 2010. The operational winter temperature changed from 50 to 40. The operational winter selection item changed from 3 to 1. The operational summer temperature changed from 90 to 95. The double counting internal work trip limit changed from to 93.84. The double counting shopping trip limit changed from to 173.604. The double counting other trip limit changed from to 201.756. The travel mode environment settings changed from both to: both The default/nodefault travel setting changed from nodefault to: nodefault Side Walks/Paths: No Sidewalks changed to: Side Walks/Paths: Complete Coverage Street Trees Provide Shade: No Coverage changed to:Street Trees Provide Shade: Some Coverage Pedestrian Circulation Access: No Destinations changed to: Pedestrian Circulation Access: Some Destinations Visually Interesting Uses: No Uses Within Walking Distance changed to: Visually Interesting Uses: Moderate Number and Variety Street System Enhances Safety: No Streets changed to: Street System Enhances Safety: Some Streets Pedestrian Safety from Crime: No Degree of Safety

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changed to: Pedestrian Safety from Crime: Some Degree of Safety Transit Service: Dial-A-Ride or No Transit Service changed to: Transit Service: Light Rail/Trolley w/in 1/2 mile Interconnected Bikeways: No Bikeway Coverage changed to: Interconnected Bikeways: Low Coverage Bike Routes Provide Paved Shoulders: No Routes changed to: Bike Routes Provide Paved Shoulders: Few Routes Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure Provide Pedestrian Signalization and Signage:0.5 has been changed from off to on. Mitigation measure Provide Street Lighting:0.5 has been changed from off to on. Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25 has been changed from off to on.

# $E = ({[F \times G]/365}/1000) \times H$

Where.

- E = Emissions of criteria pollutants in pounds per day due to electricity consumption by land uses
- F = Gross square foot of each type of land use except for residential uses;

or

- = Number of units for residential land use
- G = Electricity usage rate
- H = Emission factors in pounds per megawatt-hours (see Table A9-11-B) Varies according to the type of criteria pollutant

## **TABLE A9-11-A ELECTRICITY USAGE RATE (G)** (To determine Annual Consumption, Kilowatt-hours)

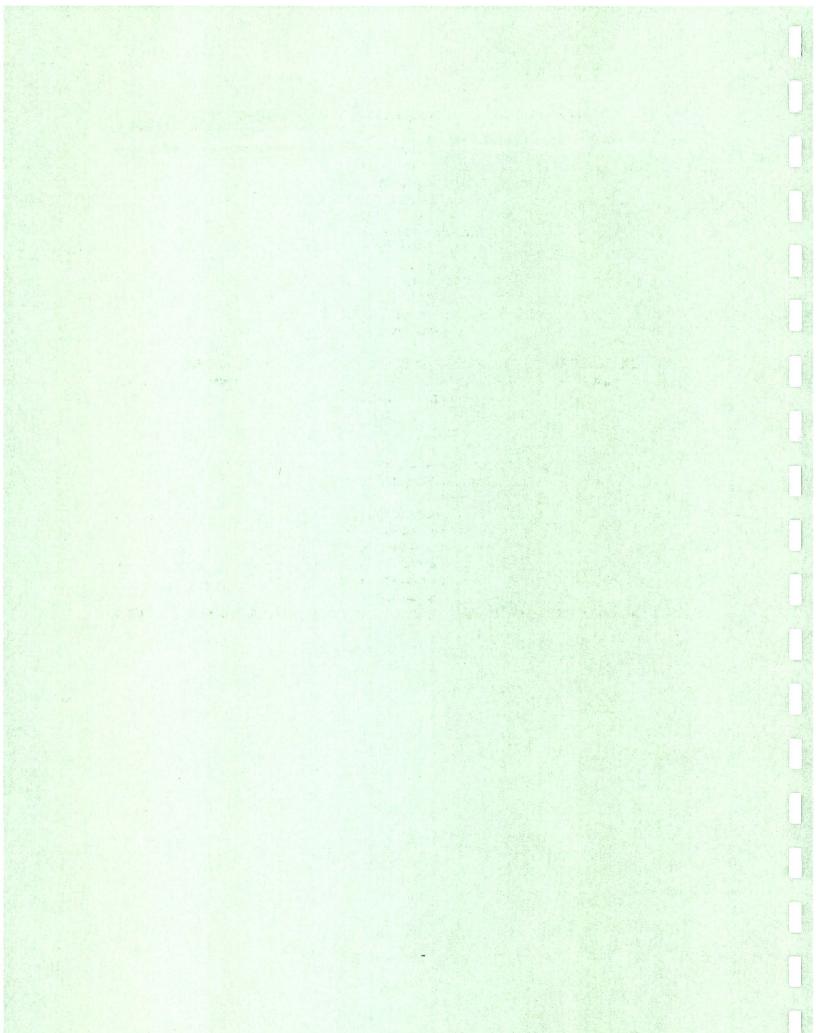
Land Use Type	Unit Type	Proposed (F)	Usage Rate <sup>1</sup> (G)	Daily Electrical Consumption (kWh)				
Residential	kWh/Unit/Yr.	68	5,626.50	1048				
Retail	kWh /sq. ft./Yr.	37,800	13.55	1267.3				
School	kWh / sq. ft./Yr.	78,400	5.90	1397.9				
Office	kWh / sq. ft./Yr.	39,400	12.95	1403.3				
Miscellaneous	kWh / sq. ft./Yr.	20,300	10.50	1133.4				
				6249.9/1000=6.2499				
1 - Average for Sou	uthern California Edison	1 - Average for Southern California Edison and Los Angeles Dept. of Water and Power						

Edison and Los Angeles Dept. of Water and Powel

## **TABLE A9-11-B EMISSIONS FACTORS (H) FOR EACH CRITERIA POLLUTANT FROM** CONSUMPTION OF ELECTRICITY (Pounds Per Megawatt-hours)

Pollutant Type	со	ROC	NOx	SOx	P <b>M</b> 10
	0.20	0.01	1.15	0.12	0.04
	x6.2499	x6.2499	x6.2499	x6.2499	x6.2499
Emissions (Ibs/day) = E	1.25	0.06	7.2	0.75	0.25

# 15.5 Noise Data



# Avenue I.: N. Fern Ave to N. Elm Ave - 2010 With Project

		AV	enue I.: N. Fe	ern Ave to N	I. EIM AVE	- 2010 With	Project	
//////	//// //////	///// //////// ///		///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
11	Speed			Vehicle Spe	ed (mph, 0	to 100)	40	//
//	Grad			Road Gradi	ient (%, 0 to	6)		//
11	Sep1			Centerline S	Separation	(feet)	48	//
//		with	>>	(Usually 2	23' for 2-lan	e, 38'		11
11		median	>>	for 4-lane	e, 50' for 6-l	ane)		//
//	Dist1			Distance fro	om observe	r to the	100	11
//				nearest l	ane centerli	ine (>50')		//
11				(used in c	alculations	)		//
//	Dist2			Dist. from F	ROW to NLC	2	30	//
11				***	CNEL @ 1	00' (SOFT)	62.91	//
//	VOL			TOTAL Veh	nicle Volume	e (two-way)	21,850	//
11	ALPHA	4		Hard site=0	, Soft site=	0.5	0	11
		DISTANCE	FROM	F	RESULT	S	DISTANCE FROM	
		Cntrline	ROW				Centerline	ROW
		489	437	< hard	60 CNEL	soft>	190	139
		155	103		65 CNEL		88	37
		49	-3		70 CNEL		41	-11
//								//
11	View		Vi	ew Angle of	Observer (	180)	180	11
//				SHIELDING	G (adjust ou	itput by hand	1)	//
11				~~~~~~~	-			//
//	Woods	6		Thickness	of woodland	d between	0	//
11				observer a	and road (fe	eet)		11
//	Cover			Percent vie	w coverage	e between	0	//
//				observer a	and road (0-	-100)		11
//	Rows				ws between	observer	0	//
11				and the second s	10 11			11
					vay (0-4).			
	//// //////		/// /////// //////			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	///////////////////////////////////////	,, 

-

## Avenue I.: N. Elm Ave to N. Siera Ave - 2010 With Project

////		///// /////////////////////////////////	///// //////// //////		///////////////////////////////////////	///////////////////////////////////////
11	Speed			Vehicle Speed (mph, 0 to 100)	40	11
//	Grad			Road Gradient (%, 0 to 6)		//
11	Sep1			Centerline Separation (feet)	48	11
//		with	>>	(Usually 23' for 2-lane, 38'		//
11		median	>>	for 4-lane, 50' for 6-lane)		//
//	Dist1			Distance from observer to the	100	//
//				nearest lane centerline (>50')		//
//				(used in calculations)		11
11	Dist2			Dist. from ROW to NLC	30	11
//				*** CNEL @ 100' (SOFT)	62.9	//
11	VOL			TOTAL Vehicle Volume (two-way)	21,785	
//	ALPH	Ą		Hard site=0, Soft site=0.5	0	//
		DISTANCE	EROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW	REGUEIS	Centerline	ROW
		Chinne	ROW		Centernne	420

		010111100				•		
		Cntrline	ROW				Centerline	ROW
		488	436	< hard	60 CNEL	soft>	190	138
		154	103		65 CNEL		88	36
		49	-3		70 CNEL		41	-11
11	1							//
11	View		١	/iew Angle of	Observer (	180)	180	//
11	1			SHIELDING	G (adjust ou	tput by hand	(t	//
11				~~~~~~	-			//
11	Wood	s		Thickness	of woodland	between	0	//
11				observer a	and road (fe	eet)		//
11	Cover			Percent vie	w coverage	e between	0	//
11				observer a	and road (0	-100)		//
11	Rows			Building rov	ws between	observer	0	//
11				and roadv	vay (0-4).			//
11		///////////////////////////////////////	///// /////////////////////////////////	// ////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////		///////////////////////////////////////

#### West Jackman.: N. Fern Ave. to N. Elm Ave - 2010 With Project

		west	ackman N	. Fern Ave. to N. Ein Ave - 2010 W	nul Projeci	
//////	//// //////	///// /////////////////////////////////	<i>                                     </i>		///////////////////////////////////////	///////////////////////////////////////
//	Speed			Vehicle Speed (mph, 0 to 100)	25	//
//	Grad			Road Gradient (%, 0 to 6)		11
//	Sep1			Centerline Separation (feet)	12	//
//		with	>>	(Usually 23' for 2-lane, 38'		//
//		median	>>	for 4-lane, 50' for 6-lane)		//
11	Dist1			Distance from observer to the	100	11
//				nearest lane centerline (>50')		//
//				(used in calculations)		//
//	Dist2			Dist. from ROW to NLC	30	//
//				*** CNEL @ 100' (SOFT)	50.2	//
11	VOL			TOTAL Vehicle Volume (two-way)	2,848	//
//	ALPHA	A.		Hard site=0, Soft site=0.5	0	//
		DISTANCE	FROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW	RECOEFC	Centerline	ROW
		21	-15	< hard 60 CNEL soft>	24	-12
		7	-29	65 CNEL	11	-25
		2	-34	70 CNEL	5	-31
//		2	-04	TOONEE	5	-31
//	View		V	iew Angle of Observer (180)	180	//
11	view		•	SHIELDING (adjust output by hand		"
//					•)	//
//	Woods			Thickness of woodland between	0	11
11		,		observer and road (feet)	v	11
//	Cover			Percent view coverage between	0	11
11	22101			observer and road (0-100)	Ū	

and roadway (0-4).

Building rows between observer

 $\parallel$ 

 $\parallel$ 

0

11

//

Rows

### West Jackman.: N. Elm Ave to Beech Ave - 2010 With Project

		vves	t Jackman.: r	N. EIM AVE t	o Beech A	ve - 2010 W	ith Project	
/////	///// //////				///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
//	Speed			Vehicle Spe	eed (mph, 0	) to 100)	25	11
//	Grad			Road Grad	ient (%, 0 to	o 6)		11
//	Sep1			Centerline	Separation	(feet)	12	11
//		with	>>	(Usually 2	23' for 2-lan	e, 38'		//
//		median	>>	for 4-lane	e, 50' for 6-l	ane)		//
//	Dist1			Distance fro	om observe	r to the	100	//
//				nearest l	ane centerl	ine (>50')		//
'/				(used in a	calculations	)		//
'/	Dist2			Dist. from F	ROW to NLO	C	30	//
/				***	CNEL @ 1	00' (SOFT)	49.01	//
/	VOL			TOTAL Vel	nicle Volum	e (two-way)	2,165	//
/	ALPH	4		Hard site=0	), Soft site=	0.5	0	//
		DISTANCE	FROM	F	RESULT	S	DISTANCE FROM	Λ
		Cntrline	ROW				Centerline	ROW
		16	-20	< hard	60 CNEL	soft>	20	-16
		5	-31		65 CNEL		9	-27
		2	-34		70 CNEL		4	-32
/								//
1	View		V	iew Angle of	Observer (	180)	180	11
/				SHIELDING	G (adjust ou	itput by hand	d)	//
1				~~~~~~	-			//
/	Woods	S		Thickness	of woodland	d between	0	//
1				observer a	and road (fe	eet)		//
/	Cover			Percent vie	w coverage	e between	0	11
1				observer a	and road (0	-100)		//
/	Rows			Building rov	ws between	observer	0	11
1				and roadv				//
////	///// //////	///// /////////////////////////////////	///// //////// /////		///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////

1

### West Jackman.: Beech Ave to N. Sierra Hwy- 2010 With Project

11111				seech Ave to N. Sierra Hwy- 2010 W		
//////	///// //////	///// /////////////////////////////////	//// //////// ////	// ////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
-//	Speed	1		Vehicle Speed (mph, 0 to 100)	25	11
//	Grad			Road Gradient (%, 0 to 6)		//
//	Sep1			Centerline Separation (feet)	12	11
11		with	>>	(Usually 23' for 2-lane, 38'		//
11		median	>>	for 4-lane, 50' for 6-lane)		11
//	Dist1			Distance from observer to the	100	//
//				nearest lane centerline (>50')		//
//				(used in calculations)		//
11	Dist2			Dist. from ROW to NLC	30	//
//				*** CNEL @ 100' (SOFT)	48.61	//
11	VOL			TOTAL Vehicle Volume (two-way)	1,973	//
11	ALPH.	A		Hard site=0, Soft site=0.5	0	11
		DISTANCE		RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		15	-21	< hard 60 CNEL soft>	18	-17
		5	-31	65 CNEL	9	-27
22.22						-27 -32
//		5	-31 -34	65 CNEL 70 CNEL	9 4	-27 -32 //
//	View	5	-31 -34	65 CNEL 70 CNEL	9 4 180	-27 -32 //
 	View	5	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand	9 4 180	-27 -32 // //
    		5 1	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand	9 4 180	-27 -32 // // //
    	View Wood	5 1	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand ~~~~~~~ Thickness of woodland between	9 4 180	-27 -32 // // //
       	Wood	5 1 s	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand ~~~~~~~ Thickness of woodland between observer and road (feet)	9 4 180 1) 0	-27 -32 // // // //
       		5 1 s	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between	9 4 180	-27 -32 // // // // //
       	Wood Cover	5 1 s	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between observer and road (0-100)	9 4 180 1) 0 0	-27 -32 // // // // // //
          	Wood	5 1 s	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between observer and road (0-100) Building rows between observer	9 4 180 1) 0	-27 -32 // // // // //
          	Wood Cover Rows	5 1 s	-31 -34	65 CNEL 70 CNEL View Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between observer and road (0-100)	9 4 180 3) 0 0 0	-27 -32 // // // // // //

-

**C**==

#### West Kettering: N. Fern Ave to N Elm Ave - 2010 With Project

		///////////////////////////////////////
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1111	111111 111111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		11111111111
//	Speed	ļ.		Vehicle Spe	ed (mph, C	to 100)	25	//
11	Grad			Road Gradi	ent (%, 0 to	06)		11
//	Sep1			Centerline S	Separation	(feet)	12	//
//		with	>>	(Usually 2	3' for 2-lan	e, 38'		11
//		median	>>	for 4-lane	e, 50' for 6-l	ane)		//
11	Dist1			Distance fro	om observe	r to the	100	11
//				nearest la	ane centerl	ine (>50')		//
//				(used in c	alculations	)		11
//	Dist2			Dist. from F	ROW to NLO	2	30	//
11				***	CNEL @ 1	00' (SOFT)	47.71	11
11	VOL			TOTAL Veh	nicle Volum	e (two-way)	1,603	//
//	ALPH/	Ą		Hard site=0	, Soft site=	0.5	0	//
		DISTANCE	FROM	R	ESULT	S	DISTANCE FROM	1
		Cntrline	ROW				Centerline	ROW
		12	-24	< hard	60 CNEL	soft>	16	-20
		4	-32		65 CNEL		7	-28
		1	-35		70 CNEL		3	-32

// ar	nd roadway (0-4).	//
	///////////////////////////////////////	///////////////////////////////////////

View Angle of Observer (180)

~~~~~~

SHIELDING (adjust output by hand)

Thickness of woodland between

Percent view coverage between

Building rows between observer

observer and road (0-100)

observer and road (feet)

11

//

//

//

11

//

11

11

11

180

0

0

0

11

11

11

 $\parallel$ 

11

11

//

11

11

View

Woods

Cover

Rows

# West Kettering: N Elm Ave to Beech Ave - 2010 With Project

| 1 | /////////////////////////////////////// | ///// ///////////////////////////////// |    |                               | /////////////////////////////////////// | /////////////////////////////////////// |
|---|-----------------------------------------|-----------------------------------------|----|-------------------------------|-----------------------------------------|-----------------------------------------|
| 1 | / Speed                                 |                                         |    | Vehicle Speed (mph, 0 to 100) | 25                                      | //                                      |
| 1 | / Grad                                  |                                         |    | Road Gradient (%, 0 to 6)     |                                         | 11                                      |
| 1 | / Sep1                                  |                                         |    | Centerline Separation (feet)  | 12                                      | //                                      |
| 1 | 1                                       | with                                    | >> | (Usually 23' for 2-lane 38'   |                                         | 11                                      |

| 11 | with   | >> | (Usually 23' for 2-lane, 38'   |       | // |
|----|--------|----|--------------------------------|-------|----|
| // | median | >> | for 4-lane, 50' for 6-lane)    |       | 11 |
| // | Dist1  |    | Distance from observer to the  | 100   | 11 |
| // |        |    | nearest lane centerline (>50') |       | 11 |
| // | ,      |    | (used in calculations)         |       | // |
| 11 | Dist2  |    | Dist. from ROW to NLC          | 30    | 11 |
| // |        |    | *** CNEL @ 100' (SOFT)         | 43.29 | 11 |
| 11 | VOL    |    | TOTAL Vehicle Volume (two-way) | 580   | 11 |
| // | ALPHA  |    | Hard site=0, Soft site=0.5     | 0     | // |
|    |        |    |                                |       |    |

|       |              | DISTANCE FROM                           |                      | RESULTS                                 | DISTANCE FROM                           |                                         |
|-------|--------------|-----------------------------------------|----------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
|       |              | Cntrline                                | ROW                  |                                         | Centerline                              | ROW                                     |
|       |              | 4                                       | -31                  | < hard 60 CNEL soft>                    | 8                                       | -28                                     |
|       |              | 1                                       | -34                  | 65 CNEL                                 | 4                                       | -32                                     |
|       |              | 0                                       | -35                  | 70 CNEL                                 | 2                                       | -34                                     |
| //    |              |                                         |                      |                                         |                                         | //                                      |
| //    | View         |                                         | V                    | iew Angle of Observer (180)             | 180                                     | 11                                      |
| //    |              |                                         |                      | SHIELDING (adjust output by hand        | (t                                      | //                                      |
| //    |              |                                         |                      | ~~~~~~                                  |                                         | 11                                      |
| //    | Woods        | 6                                       |                      | Thickness of woodland between           | 0                                       | //                                      |
| //    |              |                                         |                      | observer and road (feet)                |                                         | 11                                      |
| //    | Cover        |                                         |                      | Percent view coverage between           | 0                                       | //                                      |
| //    |              |                                         |                      | observer and road (0-100)               |                                         | //                                      |
| //    | Rows         |                                         |                      | Building rows between observer          | 0                                       | //                                      |
| //    |              |                                         |                      | and roadway (0-4).                      |                                         | 11                                      |
| ///// | ///// ////// | ///// ///////////////////////////////// | ///// //////// ///// | 1 1111111111111111111111111111111111111 | /////////////////////////////////////// | /////////////////////////////////////// |

RBF Consulting. 27-Jan-03 JN 10-100183

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### N. Fern Ave: Ave I to W. Jackman- 2010 With Project

|       |              |                                         |                   |                | uominani a                              |                                         | i oject                                 |                                         |
|-------|--------------|-----------------------------------------|-------------------|----------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| ///// |              | ///// ///////////////////////////////// | // /////// ////// |                | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |
| //    | Speed        |                                         |                   | Vehicle Spee   | ed (mph, 0                              | to 100)                                 | 25                                      | //                                      |
| '/    | Grad         |                                         |                   | Road Gradie    | ent (%, 0 to                            | 6)                                      |                                         | 11                                      |
| /     | Sep1         |                                         |                   | Centerline S   | eparation                               | (feet)                                  | 12                                      | //                                      |
| /     |              | with                                    | >>                | (Usually 23    | 3' for 2-lan                            | e, 38'                                  |                                         | 11                                      |
| 1     |              | median                                  | >>                | for 4-lane,    | , 50' for 6-l                           | ane)                                    |                                         | //                                      |
|       | Dist1        |                                         |                   | Distance from  | m observe                               | r to the                                | 100                                     | 11                                      |
|       |              |                                         |                   | nearest la     | ne centerli                             | ine (>50')                              |                                         | //                                      |
|       |              |                                         |                   | (used in ca    | alculations                             | )                                       |                                         | 11                                      |
|       | Dist2        |                                         |                   | Dist. from R   | OW to NLC                               | 2                                       | 30                                      | 11                                      |
|       |              |                                         |                   | *** (          | CNEL @ 1                                | 00' (SOFT)                              | 50.94                                   | 11                                      |
|       | VOL          |                                         |                   | TOTAL Vehi     | cle Volum                               | e (two-way)                             | 3,377                                   | 11                                      |
|       | ALPHA        | 4                                       |                   | Hard site=0,   | Soft site=                              | 0.5                                     | 0                                       | //                                      |
|       |              | DISTANCE I                              | FROM              | R              | ESULT                                   | S                                       | DISTANCE FROM                           |                                         |
|       |              | Cntrline                                | ROW               |                |                                         |                                         | Centerline                              | ROW                                     |
|       |              | 25                                      | -11               | < hard         | 60 CNEL                                 | soft>                                   | 26                                      | -9                                      |
|       |              | 8                                       | -28               |                | 65 CNEL                                 |                                         | 12                                      | -24                                     |
|       |              | 3                                       | -33               |                | 70 CNEL                                 |                                         | 6                                       | -30                                     |
|       |              |                                         |                   |                |                                         |                                         |                                         | 11                                      |
|       | View         |                                         | Vi                | iew Angle of ( | Observer (                              | 180)                                    | 180                                     | 11                                      |
|       |              |                                         |                   | SHIELDING      | (adjust ou                              | tput by hand                            | d)                                      | 11                                      |
| 8     |              |                                         |                   | ~~~~~~         |                                         |                                         |                                         | 11                                      |
|       | Woods        | 5                                       |                   | Thickness of   | f woodland                              | l between                               | 0                                       | 11                                      |
|       |              |                                         |                   | observer a     | nd road (fe                             | eet)                                    |                                         | //                                      |
|       | Cover        |                                         |                   | Percent view   | v coverage                              | between                                 | 0                                       | 11                                      |
|       |              |                                         |                   | observer a     | nd road (0-                             | -100)                                   |                                         | 11                                      |
|       | Rows         |                                         |                   | Building row   | s between                               | observer                                | 0                                       | 11                                      |
| 1     |              |                                         |                   | and roadwa     | ay (0-4).                               |                                         |                                         | 11                                      |
| 1111  | 11111 111111 | ///// ///////////////////////////////// | 11 11111111 11111 |                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                                         | /////////////////////////////////////// | /////////////////////////////////////// |

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# N. Fern Ave: W. Jackman to W. Kettering - 2010 With Project

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|--------|-------|-----------------------------------------|----|--------------------------------|-------|-----------------------------------------|
| 11     | Speed |                                         |    | Vehicle Speed (mph, 0 to 100)  | 25    | 11                                      |
| //     | Grad  |                                         |    | Road Gradient (%, 0 to 6)      |       | 11                                      |
| 11     | Sep1  |                                         |    | Centerline Separation (feet)   | 12    | 11                                      |
| //     |       | with                                    | >> | (Usually 23' for 2-lane, 38'   |       | //                                      |
| //     |       | median                                  | >> | for 4-lane, 50' for 6-lane)    |       | //                                      |
| 11     | Dist1 |                                         |    | Distance from observer to the  | 100   | 11                                      |
| //     |       |                                         |    | nearest lane centerline (>50') |       | 11                                      |
| //     |       |                                         |    | (used in calculations)         |       | 11                                      |
| 11     | Dist2 |                                         |    | Dist. from ROW to NLC          | 30    | 11                                      |
| 11     |       |                                         |    | *** CNEL @ 100' (SOFT)         | 51.55 | 11                                      |
| 11     | VOL   |                                         |    | TOTAL Vehicle Volume (two-way) | 3,887 | //                                      |
| 11     | ALPH/ | A                                       |    | Hard site=0, Soft site=0.5     | 0     | //                                      |

|       |              | DISTANCE<br>Cntrline                    | E FROM<br>ROW         |              | RESULT                                  | -                                       | DISTANCE FROM<br>Centerline             | ROW       |
|-------|--------------|-----------------------------------------|-----------------------|--------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------|
|       |              | 29                                      | -7                    | < hard       | 60 CNEL                                 | soft>                                   | 29                                      | -7        |
|       |              | 9                                       | -27                   |              | 65 CNEL                                 |                                         | 13                                      | -22       |
|       |              | 3                                       | -33                   |              | 70 CNEL                                 |                                         | 6                                       | -30       |
| //    |              |                                         |                       |              |                                         |                                         |                                         | 11        |
| //    | View         |                                         | V                     | iew Angle of | Observer (                              | 180)                                    | 180                                     | //        |
| //    |              |                                         |                       | SHIELDING    | G (adjust ou                            | tput by hand                            | )                                       | 11        |
| //    |              |                                         |                       | ~~~~~~~      | -                                       |                                         |                                         | 11        |
| //    | Woods        | 6                                       |                       | Thickness (  | of woodland                             | l between                               | 0                                       | 11        |
| //    |              |                                         |                       | observer a   | and road (fe                            | eet)                                    |                                         | //        |
| //    | Cover        |                                         |                       | Percent vie  | w coverage                              | between                                 | 0                                       | //        |
| //    |              |                                         |                       | observer a   | and road (0-                            | -100)                                   |                                         | 11        |
| 11    | Rows         |                                         |                       | Building rov | vs between                              | observer                                | 0                                       | 11        |
| //    |              |                                         |                       | and roadw    | vay (0-4).                              |                                         |                                         | //        |
| ///// | ///// ////// | ///// ///////////////////////////////// | ///// //////// ////// |              | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | ///////// |

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### N. Elm Ave: Ave I to W. Jackman - 2010 With Project

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|------------------|-----------------------------------------|-----------------------------------------|--------------------|-----------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|---------------|-----------------------------------------|
|                  | Speed                                   |                                         |                    | Vehicle Spe                                         |                                                           |                                               | 25            |                                         |
| 11               | Grad                                    |                                         |                    | Road Grad                                           |                                                           |                                               | 20            | //                                      |
| //               | Sep1                                    |                                         |                    | Centerline                                          |                                                           |                                               | 12            | //                                      |
| //               | Ochi                                    | with                                    | >>                 |                                                     | 23' for 2-lan                                             | . ,                                           | 12            | //                                      |
| //               |                                         | median                                  | >>                 |                                                     | e, 50' for 6-l                                            |                                               |               | 11                                      |
| 11               | Dist1                                   | meulan                                  |                    | Distance fr                                         |                                                           | ,                                             | 100           |                                         |
| 11               | DIST                                    |                                         |                    |                                                     |                                                           |                                               | 100           | //                                      |
| 11               |                                         |                                         |                    |                                                     | ane centerli                                              | . ,                                           |               | //                                      |
| 11               | Diato                                   |                                         |                    |                                                     | alculations                                               |                                               | 20            | 11                                      |
|                  | Dist2                                   |                                         |                    | Dist. from F                                        |                                                           | <b>T</b>                                      | 30            | 11                                      |
| 11               |                                         |                                         |                    |                                                     |                                                           | 00' (SOFT)                                    | 48.13         | //                                      |
| //               | VOL                                     | •                                       |                    |                                                     |                                                           | e (two-way)                                   | 1,767         | //                                      |
| //               | ALPHA                                   | 4                                       |                    | Hard site=(                                         | ), Soft site=                                             | 0.5                                           | 0             | //                                      |
|                  |                                         | DISTANCE                                | FROM               | -                                                   |                                                           | 0                                             |               |                                         |
|                  |                                         | DISTANCE                                |                    | F                                                   | RESULT                                                    | 5                                             | DISTANCE FROM |                                         |
|                  |                                         | Cntrline                                | ROW                | d hand                                              |                                                           |                                               | Centerline    | ROW                                     |
|                  |                                         | 13                                      | -23                | < nard                                              | 60 CNEL                                                   | son>                                          | 17            | -19                                     |
|                  |                                         | 4                                       | -32                |                                                     | 65 CNEL                                                   |                                               | 8             | -28                                     |
|                  |                                         | 1                                       | -35                |                                                     | 70 CNEL                                                   |                                               | 4             | -32                                     |
| //               |                                         |                                         |                    |                                                     |                                                           |                                               |               | //                                      |
|                  |                                         |                                         |                    |                                                     |                                                           |                                               |               |                                         |
| //               | View                                    |                                         | V                  | iew Angle of                                        |                                                           |                                               | 180           | //                                      |
| //               | View                                    |                                         | V                  | -                                                   |                                                           | 180)<br>tput by hand                          |               | //<br>//                                |
| //<br>//         | View                                    |                                         | V                  | SHIELDING                                           | G (adjust ou                                              | tput by hand                                  |               | //                                      |
| <br>  <br>       | View<br>Woods                           | 5                                       | V                  | SHIELDING                                           | G (adjust ou                                              | tput by hand                                  |               | //<br>//                                |
| //<br>//         |                                         | 5                                       | V                  | SHIELDING<br>Thickness<br>observer                  | G (adjust ou<br>of woodland<br>and road (fe               | tput by hand<br>I between<br>eet)             | 1)            | <br>  <br>                              |
| <br>  <br>  <br> |                                         | -                                       | V                  | SHIELDING<br>Thickness<br>observer a<br>Percent vie | G (adjust ou<br>of woodlanc<br>and road (fe<br>w coverage | tput by hand<br>l between<br>et)<br>e between | 1)            | <br>  <br>                              |
| //<br>//<br>//   | Woods                                   | -                                       | V                  | SHIELDING<br>Thickness<br>observer a<br>Percent vie | G (adjust ou<br>of woodland<br>and road (fe               | tput by hand<br>l between<br>et)<br>e between | d)<br>O       | <br>  <br>  <br>                        |

// and roadway (0-4). //

Building rows between observer

11

0

//

Rows

# N Elm Ave: W Kettering to W Lancaster - 2010 With Project

|       |              | N. Eln             | n Ave: W. Ke      | ettering to V                           | V. Lancast                              | er - 2010 Wi                            | th Project                              |                                         |
|-------|--------------|--------------------|-------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|
| ///// |              | ///// //////// /// | // /////// ////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |
| //    | Speed        |                    |                   | Vehicle Spe                             | ed (mph, 0                              | ) to 100)                               | 25                                      | //                                      |
| //    | Grad         |                    |                   | Road Gradi                              | ent (%, 0 to                            | o 6)                                    |                                         | 11                                      |
| //    | Sep1         |                    |                   | Centerline S                            | Separation                              | (feet)                                  | 12                                      | //                                      |
| 1     |              | with               | >>                | (Usually 2                              | 3' for 2-lan                            | e, 38'                                  |                                         | 11                                      |
| 1     |              | median             | >>                | for 4-lane                              | e, 50' for 6-l                          | lane)                                   |                                         | //                                      |
| /     | Dist1        |                    |                   | Distance fro                            | om observe                              | er to the                               | 100                                     | //                                      |
| 1     |              |                    |                   | nearest la                              | ane centerl                             | ine (>50')                              |                                         | 11                                      |
|       |              |                    |                   | (used in c                              | alculations                             | )                                       |                                         | //                                      |
|       | Dist2        |                    |                   | Dist. from F                            | ROW to NLC                              | 0                                       | 30                                      | //                                      |
|       |              |                    |                   | ***                                     | CNEL @ 1                                | 00' (SOFT)                              | 56.41                                   | //                                      |
|       | VOL          |                    |                   | TOTAL Veh                               | nicle Volum                             | e (two-way)                             | 11,881                                  | 11                                      |
|       | ALPHA        | 4                  |                   | Hard site=0                             | , Soft site=                            | 0.5                                     | 0                                       | //                                      |
|       |              | DISTANCE I         | ROM               | R                                       | RESULT                                  | S                                       | DISTANCE FROM                           |                                         |
|       |              | Cntrline           | ROW               |                                         |                                         |                                         | Centerline                              | ROW                                     |
|       |              | 89                 | 53                | < hard                                  | 60 CNEL                                 | soft>                                   | 61                                      | 25                                      |
|       |              | 28                 | -8                |                                         | 65 CNEL                                 |                                         | 28                                      | -8                                      |
|       |              | 9                  | -27               |                                         | 70 CNEL                                 |                                         | 13                                      | -23                                     |
|       |              |                    |                   |                                         |                                         |                                         |                                         | 11                                      |
|       | View         |                    | Vi                | iew Angle of                            | Observer (                              | 180)                                    | 180                                     | 11                                      |
|       |              |                    |                   | SHIELDING                               | G (adjust ou                            | tput by hand                            | (t                                      | //                                      |
|       |              |                    |                   | ~~~~~~                                  |                                         |                                         |                                         | 11                                      |
|       | Woods        | 6                  |                   | Thickness of                            | of woodland                             | d between                               | 0                                       | //                                      |
|       |              |                    |                   | observer a                              | and road (fe                            | eet)                                    |                                         | 11                                      |
|       | Cover        |                    |                   | Percent vie                             | w coverage                              | e between                               | 0                                       | 11                                      |
|       |              |                    |                   | observer a                              | and road (0-                            | -100)                                   |                                         | 11                                      |
|       | Rows         |                    |                   | Building rov                            |                                         |                                         | 0                                       | //                                      |
|       |              |                    |                   | and roadw                               |                                         |                                         |                                         | 11                                      |
| ////  | ///// ////// | ///// //////// /// | // /////// ////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |                                         | /////////////////////////////////////// |

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# Beech Ave: North of West Jackman - 2010 With Project

| /////                  |                        | ///// //////// /// | // /////// /////  |                                                                                                                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                                                                                                                                     |                                         | ///////////////////////////////////////                     |
|------------------------|------------------------|--------------------|-------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|
| //                     | Speed                  |                    |                   |                                                                                                                   | eed (mph, 0 to 100)                                                                                                                                                         | 25                                      | 11                                                          |
| 11                     | Grad                   |                    |                   |                                                                                                                   | ient (%, 0 to 6)                                                                                                                                                            |                                         | //                                                          |
| //                     | Sep1                   |                    |                   |                                                                                                                   | Separation (feet)                                                                                                                                                           | 12                                      | 11                                                          |
| 11                     |                        | with               | >>                |                                                                                                                   | 23' for 2-lane, 38'                                                                                                                                                         |                                         | 11                                                          |
| //                     |                        | median             | >>                |                                                                                                                   | e, 50' for 6-lane)                                                                                                                                                          |                                         | //                                                          |
| <br>                   | Dist1                  |                    |                   |                                                                                                                   | om observer to the ane centerline (>50')                                                                                                                                    | 100                                     | //<br>//                                                    |
| //                     |                        |                    |                   | (used in c                                                                                                        | calculations)                                                                                                                                                               |                                         | 11                                                          |
| //                     | Dist2                  |                    |                   | Dist. from F                                                                                                      | ROW to NLC                                                                                                                                                                  | 30                                      | //                                                          |
| //                     |                        |                    |                   | ***                                                                                                               | CNEL @ 100' (SOFT)                                                                                                                                                          | 42.2                                    | //                                                          |
| 11                     | VOL                    |                    |                   | TOTAL Veh                                                                                                         | nicle Volume (two-way)                                                                                                                                                      | 451                                     | //                                                          |
| //                     | ALPH/                  | 4                  |                   | Hard site=0                                                                                                       | ), Soft site=0.5                                                                                                                                                            | 0                                       | //                                                          |
|                        |                        | DISTANCE           | FROM              | F                                                                                                                 | RESULTS                                                                                                                                                                     | DISTANCE FROM                           |                                                             |
|                        |                        |                    |                   |                                                                                                                   |                                                                                                                                                                             |                                         |                                                             |
|                        |                        | Cntrline           | ROW               |                                                                                                                   |                                                                                                                                                                             | Centerline                              | ROW                                                         |
|                        |                        | Cntrline<br>3      | -32               | < hard                                                                                                            | 60 CNEL soft>                                                                                                                                                               | 7                                       | -29                                                         |
|                        |                        | 3<br>1             | -32<br>-35        | < hard                                                                                                            | 65 CNEL                                                                                                                                                                     | 7<br>3                                  | -29<br>-33                                                  |
|                        |                        |                    | -32               | < hard                                                                                                            |                                                                                                                                                                             | 7                                       | -29<br>-33<br>-34                                           |
| 11                     |                        | 3<br>1             | -32<br>-35<br>-36 |                                                                                                                   | 65 CNEL<br>70 CNEL                                                                                                                                                          | 7<br>3<br>1                             | -29<br>-33<br>-34<br>//                                     |
| //                     | View                   | 3<br>1             | -32<br>-35<br>-36 | iew Angle of                                                                                                      | 65 CNEL<br>70 CNEL<br>Observer (180)                                                                                                                                        | 7<br>3<br>1<br>180                      | -29<br>-33<br>-34<br>//                                     |
| <br>                   | View                   | 3<br>1             | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC                                                                                         | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand                                                                                                            | 7<br>3<br>1<br>180                      | -29<br>-33<br>-34<br>//<br>//                               |
| <br>  <br>             |                        | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC                                                                                         | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand                                                                                                            | 7<br>3<br>1<br>180                      | -29<br>-33<br>-34<br>//<br>//<br>//                         |
| <br>  <br>             | View                   | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC                                                                                         | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between                                                                                     | 7<br>3<br>1<br>180                      | -29<br>-33<br>-34<br>//<br>//<br>//<br>//                   |
| <br>  <br>  <br>       | Woods                  | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC<br><br>Thickness of<br>observer a                                                       | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between<br>and road (feet)                                                                  | 7<br>3<br>1<br>180<br>3)<br>0           | -29<br>-33<br>-34<br>//<br>//<br>//<br>//                   |
| <br>  <br>  <br>       |                        | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC<br><br>Thickness of<br>observer a<br>Percent vie                                        | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between<br>and road (feet)<br>w coverage between                                            | 7<br>3<br>1<br>180                      | -29<br>-33<br>-34<br>//<br>//<br>//<br>//<br>//             |
| <br>  <br>  <br>       | Woods<br>Cover         | 3<br>1<br>0        | -32<br>-35<br>-36 | Tiew Angle of<br>SHIELDING<br>Thickness of<br>observer a<br>Percent vie<br>observer a                             | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)                        | 7<br>3<br>1<br>180<br>3)<br>0<br>0      | -29<br>-33<br>-34<br>//<br>//<br>//<br>//<br>//<br>//       |
| <br>  <br>  <br>  <br> | Woods                  | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDING<br>Thickness of<br>observer a<br>Percent vie<br>observer a<br>Building rov              | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)<br>ws between observer | 7<br>3<br>1<br>180<br>3)<br>0           | -29<br>-33<br>-34<br>//<br>//<br>//<br>//<br>//<br>//<br>// |
| <br>  <br>  <br>  <br> | Woods<br>Cover<br>Rows | 3<br>1<br>0        | -32<br>-35<br>-36 | iew Angle of<br>SHIELDINC<br>Thickness of<br>observer a<br>Percent vie<br>observer a<br>Building rov<br>and roadw | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by hand<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)<br>ws between observer | 7<br>3<br>1<br>180<br>3)<br>0<br>0<br>0 | -29<br>-33<br>-34<br>//<br>//<br>//<br>//<br>//<br>//       |

### Beech Ave: West Jackman to W. Kettering- 2010 With Project

|       |              | Beech              | n Ave: West        | Jackman to W. Kettering- 2010 W  | ith Project                             |           |
|-------|--------------|--------------------|--------------------|----------------------------------|-----------------------------------------|-----------|
| ///// | ///// ////// | ///// //////// /// | /// //////// ///// |                                  | /////////////////////////////////////// | ///////// |
| 11    | Speed        |                    |                    | Vehicle Speed (mph, 0 to 100)    | 25                                      | 11        |
| 11    | Grad         |                    |                    | Road Gradient (%, 0 to 6)        |                                         | 11        |
| //    | Sep1         |                    |                    | Centerline Separation (feet)     | 12                                      | //        |
| 11    |              | with               | >>                 | (Usually 23' for 2-lane, 38'     |                                         | //        |
| //    |              | median             | >>                 | for 4-lane, 50' for 6-lane)      |                                         | //        |
| //    | Dist1        |                    |                    | Distance from observer to the    | 100                                     | 11        |
| //    |              |                    |                    | nearest lane centerline (>50')   |                                         | //        |
| //    |              |                    |                    | (used in calculations)           |                                         | 11        |
| //    | Dist2        |                    |                    | Dist. from ROW to NLC            | 30                                      | //        |
| //    |              |                    |                    | *** CNEL @ 100' (SOFT)           | 47.56                                   | //        |
| //    | VOL          |                    |                    | TOTAL Vehicle Volume (two-way)   | 1,548                                   | //        |
| //    | ALPHA        | 4                  |                    | Hard site=0, Soft site=0.5       | 0                                       | 11        |
|       |              |                    |                    |                                  |                                         |           |
|       |              | DISTANCE           | FROM               | RESULTS                          | DISTANCE FROM                           |           |
|       |              | Cntrline           | ROW                |                                  | Centerline                              | ROW       |
|       |              | 12                 | -24                | < hard 60 CNEL soft>             | 16                                      | -20       |
|       |              | 4                  | -32                | 65 CNEL                          | 7                                       | -29       |
|       |              | 1                  | -35                | 70 CNEL                          | 3                                       | -32       |
| //    |              |                    |                    |                                  |                                         | //        |
| //    | View         |                    | V                  | /iew Angle of Observer (180)     | 180                                     | //        |
| //    |              |                    |                    | SHIELDING (adjust output by hand | 1)                                      | //        |
| //    |              |                    |                    | ~~~~~~                           |                                         | //        |
| 11    | Woods        | 6                  |                    | Thickness of woodland between    | 0                                       | 11        |
| //    |              |                    |                    | observer and road (feet)         |                                         | //        |
| 11    | Cover        |                    |                    | Percent view coverage between    | 0                                       | 11        |
| //    |              |                    |                    | observer and road (0-100)        |                                         | //        |
| 11    | Rows         |                    |                    | Building rows between observer   | 0                                       | 11        |
|       |              |                    |                    |                                  | •                                       |           |

# N. Sierra Hwy: Ave I to West Jackman - 2010 With Project

| /////            | //// //////    | ///// //////// ////          | // //////// //////      |                                                                                                                                                                                                                      |                                                 | ///////////////////////////////////////              |
|------------------|----------------|------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------|
| //               | Speed          |                              |                         | Vehicle Speed (mph, 0 to 100)                                                                                                                                                                                        | 45                                              | //                                                   |
| //               | Grad           |                              |                         | Road Gradient (%, 0 to 6)                                                                                                                                                                                            |                                                 | //                                                   |
| //               | Sep1           |                              |                         | Centerline Separation (feet)                                                                                                                                                                                         | 42                                              | 11                                                   |
| //               |                | with                         | >>                      | (Usually 23' for 2-lane, 38'                                                                                                                                                                                         |                                                 | //                                                   |
| //               |                | median                       | >>                      | for 4-lane, 50' for 6-lane)                                                                                                                                                                                          |                                                 | //                                                   |
| //               | Dist1          |                              |                         | Distance from observer to the                                                                                                                                                                                        | 100                                             | //                                                   |
| //               |                |                              |                         | nearest lane centerline (>50')                                                                                                                                                                                       |                                                 | //                                                   |
| //               |                |                              |                         | (used in calculations)                                                                                                                                                                                               |                                                 | //                                                   |
| //               | Dist2          |                              |                         | Dist. from ROW to NLC                                                                                                                                                                                                | 30                                              | 11                                                   |
| //               |                |                              |                         | *** CNEL @ 100' (SOFT)                                                                                                                                                                                               | 61.6                                            | //                                                   |
| //               | VOL            |                              |                         | TOTAL Vehicle Volume (two-way)                                                                                                                                                                                       | 11,654                                          | //                                                   |
| //               | ALPH           | 4                            |                         | Hard site=0, Soft site=0.5                                                                                                                                                                                           | 0                                               | 11                                                   |
|                  |                | DISTANCE F                   |                         | RESULTS                                                                                                                                                                                                              | DISTANCE FROM                                   |                                                      |
|                  |                | Cntrline<br>350<br>111<br>35 | ROW<br>301<br>62<br>-14 | < hard 60 CNEL soft><br>65 CNEL<br>70 CNEL                                                                                                                                                                           | Centerline<br>152<br>71<br>33                   | ROW<br>103<br>22<br>-16                              |
| //               |                | 350<br>111                   | 301<br>62               |                                                                                                                                                                                                                      | 152<br>71                                       | 103                                                  |
| <br>             | View           | 350<br>111                   | 301<br>62<br>-14        | 65 CNEL                                                                                                                                                                                                              | 152<br>71                                       | 103<br>22<br>-16                                     |
|                  | View           | 350<br>111                   | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL                                                                                                                                                                                                   | <b>152</b><br><b>71</b><br><b>33</b><br>180     | 103<br>22<br>-16<br>//                               |
| //               | View           | 350<br>111                   | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)                                                                                                                                                                    | <b>152</b><br><b>71</b><br><b>33</b><br>180     | 103<br>22<br>-16<br>//                               |
| <br>             | View           | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand                                                                                                                                | <b>152</b><br><b>71</b><br><b>33</b><br>180     | 103<br>22<br>-16<br>//<br>//                         |
| <br>  <br>       |                | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand                                                                                                                                | <b>152</b><br>71<br><b>33</b><br>180<br>d)      | 103<br>22<br>-16<br>//<br>//                         |
| <br>  <br>       |                | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand<br>~~~~~~<br>Thickness of woodland between                                                                                     | <b>152</b><br>71<br><b>33</b><br>180<br>d)      | 103<br>22<br>-16<br>//<br>//<br>//                   |
| <br>  <br>  <br> | Woods          | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)                                                               | <b>152</b><br>71<br>33<br>180<br>d)             | 103<br>22<br>-16<br>//<br>//<br>//<br>//             |
| <br>  <br>  <br> | Woods          | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)<br>Percent view coverage between                              | <b>152</b><br>71<br>33<br>180<br>d)             | 103<br>22<br>-16<br>//<br>//<br>//<br>//<br>//       |
| <br>  <br>  <br> | Woods<br>Cover | 350<br>111<br>35             | 301<br>62<br>-14        | 65 CNEL<br>70 CNEL<br>iew Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)<br>Percent view coverage between<br>observer and road (0-100) | <b>152</b><br>71<br><b>33</b><br>180<br>d)<br>0 | 103<br>22<br>-16<br>//<br>//<br>//<br>//<br>//<br>// |

# Avenue I.: N. Fern Ave to N. Elm Ave - 2010 Without Project

|                        |                        | Ave                                     |                    | ern Ave to N. Elm Ave - 2010 Withou                                                                                                                                                                                                                     | il Flojeci                              |                                         |
|------------------------|------------------------|-----------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|
| /////                  | ///// //////           | ///// ///////////////////////////////// | //// //////// //// |                                                                                                                                                                                                                                                         | /////////////////////////////////////// | /////////////////////////////////////// |
| //                     | Speed                  |                                         |                    | Vehicle Speed (mph, 0 to 100)                                                                                                                                                                                                                           | 40                                      | //                                      |
| //                     | Grad                   |                                         |                    | Road Gradient (%, 0 to 6)                                                                                                                                                                                                                               |                                         | 11                                      |
| 11                     | Sep1                   |                                         |                    | Centerline Separation (feet)                                                                                                                                                                                                                            | 48                                      | 11                                      |
| //                     |                        | with                                    | >>                 | (Usually 23' for 2-lane, 38'                                                                                                                                                                                                                            |                                         | //                                      |
| //                     |                        | median                                  | >>                 | for 4-lane, 50' for 6-lane)                                                                                                                                                                                                                             |                                         | //                                      |
| //                     | Dist1                  |                                         |                    | Distance from observer to the                                                                                                                                                                                                                           | 100                                     | //                                      |
| //                     |                        |                                         |                    | nearest lane centerline (>50')                                                                                                                                                                                                                          |                                         | //                                      |
| //                     |                        |                                         |                    | (used in calculations)                                                                                                                                                                                                                                  |                                         | 11                                      |
| //                     | Dist2                  |                                         |                    | Dist. from ROW to NLC                                                                                                                                                                                                                                   | 30                                      | 11                                      |
| //                     |                        |                                         |                    | *** CNEL @ 100' (SOFT)                                                                                                                                                                                                                                  | 62.84                                   | 11                                      |
| 11                     | VOL                    |                                         |                    | TOTAL Vehicle Volume (two-way)                                                                                                                                                                                                                          | 21,481                                  | 11                                      |
| //                     | ALPH/                  | 4                                       |                    | Hard site=0, Soft site=0.5                                                                                                                                                                                                                              | 0                                       | 11                                      |
|                        |                        | DISTANCE<br>Cntrline                    | ROW                | RESULTS                                                                                                                                                                                                                                                 | DISTANCE FROM<br>Centerline             | ROW                                     |
|                        |                        |                                         |                    |                                                                                                                                                                                                                                                         | 100                                     | 100                                     |
|                        |                        | 481                                     | 429                | < hard 60 CNEL soft>                                                                                                                                                                                                                                    | 188                                     | 136                                     |
|                        |                        | 152                                     | 100                | 65 CNEL                                                                                                                                                                                                                                                 | 87                                      | 36                                      |
| ,,                     |                        |                                         |                    |                                                                                                                                                                                                                                                         |                                         | 36<br>-11                               |
| 11                     | <i>\C</i>              | 152                                     | 100<br>-4          | 65 CNEL<br>70 CNEL                                                                                                                                                                                                                                      | 87<br>41                                | 36<br>-11<br>//                         |
| //                     | View                   | 152                                     | 100<br>-4          | 65 CNEL<br>70 CNEL                                                                                                                                                                                                                                      | <b>87</b><br><b>41</b><br>180           | 36<br>-11<br>//                         |
| <br>                   | View                   | 152                                     | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand                                                                                                                                                                  | <b>87</b><br><b>41</b><br>180           | 36<br>-11<br>//<br>//                   |
| <br>  <br>             |                        | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand                                                                                                                                                                  | 87<br>41<br>180                         | 36<br>-11<br>//<br>//                   |
| <br>  <br>             | View<br>Woods          | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br>~~~~~~<br>Thickness of woodland between                                                                                                                       | <b>87</b><br><b>41</b><br>180           | 36<br>-11<br>//<br>//<br>//             |
| <br>  <br>  <br>       | Woods                  | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br>~~~~~~~<br>Thickness of woodland between<br>observer and road (feet)                                                                                          | 87<br>41<br>180<br>1)<br>0              | 36<br>-11<br>//<br>//<br>//             |
| <br>  <br>  <br>       |                        | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br>                                                                                                                                                              | 87<br>41<br>180                         | 36<br>-11<br>//<br>//<br>//<br>//       |
| <br>  <br>  <br>       | Woods<br>Cover         | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)<br>Percent view coverage between<br>observer and road (0-100)                                   | 87<br>41<br>180<br>1)<br>0<br>0         | 36<br>-11<br>//<br>//<br>//<br>//<br>// |
| <br>  <br>  <br>  <br> | Woods                  | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)<br>Percent view coverage between<br>observer and road (0-100)<br>Building rows between observer | 87<br>41<br>180<br>1)<br>0              | 36<br>-11<br>//<br>//<br>//<br>//       |
| <br>  <br>  <br>  <br> | Woods<br>Cover<br>Rows | 152<br>48                               | 100<br>-4          | 65 CNEL<br>70 CNEL<br>View Angle of Observer (180)<br>SHIELDING (adjust output by hand<br><br>Thickness of woodland between<br>observer and road (feet)<br>Percent view coverage between<br>observer and road (0-100)                                   | 87<br>41<br>180<br>3)<br>0<br>0<br>0    | 36<br>-11<br>//<br>//<br>//<br>//<br>// |

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### Avenue I.: N. Elm Ave to N. Siera Ave - 2010 Without Project

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|--------|-------------|--------------------|------------------|--------------|----------------|-----------------------------------------|---------------|-----------------------------------------|
| 11     | Speed       |                    |                  | Vehicle Spe  | eed (mph, 0    | to 100)                                 | 40            | //                                      |
| //     | Grad        |                    |                  | Road Grad    | ient (%, 0 to  | 06)                                     |               | //                                      |
| 11     | Sep1        |                    |                  | Centerline   | Separation     | (feet)                                  | 48            | //                                      |
| //     |             | with               | >>               |              | 23' for 2-lan  | . ,                                     |               | 11                                      |
| 11     |             | median             | >>               |              | e, 50' for 6-l |                                         |               | //                                      |
| //     | Dist1       |                    |                  |              | om observe     |                                         | 100           | //                                      |
| 11     |             |                    |                  | nearest l    | ane centerli   | ine (>50')                              |               | //                                      |
| //     |             |                    |                  |              | calculations   | , ,                                     |               | 11                                      |
| 11     | Dist2       |                    |                  | Dist. from F | ROW to NLC     | Ċ                                       | 30            | //                                      |
| //     |             |                    |                  | ***          | CNEL @ 1       | 00' (SOFT)                              | 62.83         | 11                                      |
| //     | VOL         |                    |                  |              |                | e (two-way)                             | 21,406        | //                                      |
| //     | ALPHA       | 4                  |                  | Hard site=0  | ), Soft site=  | 0.5                                     | 0             | 11                                      |
|        |             |                    |                  |              |                |                                         |               |                                         |
|        |             | DISTANCE I         | FROM             | F            | RESULT         | S                                       | DISTANCE FROM |                                         |
|        |             | Cntrline           | ROW              |              |                |                                         | Centerline    | ROW                                     |
|        |             | 479                | 427              | < hard       | 60 CNEL        | soft>                                   | 188           | 136                                     |
|        |             | 151                | 100              |              | 65 CNEL        |                                         | 87            | 36                                      |
|        |             | 48                 | -4               |              | 70 CNEL        |                                         | 40            | -11                                     |
| //     |             |                    |                  |              |                |                                         |               | //                                      |
| 11     | View        |                    | V                | iew Angle of | Observer (     | 180)                                    | 180           | //                                      |
| //     |             |                    |                  | SHIELDING    | G (adjust ou   | itput by hand                           | (b            | 11                                      |
|        |             |                    |                  |              |                |                                         |               |                                         |

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Thickness of woodland between

Percent view coverage between

Building rows between observer

observer and road (feet)

observer and road (0-100)

and roadway (0-4).

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11

//

11

11

11

//

11

Woods

Cover

Rows

# West Jackman.: N. Fern Ave. to N. Elm Ave - 2010 Without Project

|  |  |  | ///// |
|--|--|--|-------|
|--|--|--|-------|

| //// |       | ///// ///////////////////////////////// | ///// //////// ////// | /////////////////////////////////////// | /////////////////////////////////////// | ///////// |
|------|-------|---|-----------------------|---|---|-----------|
| //   | Speed |   |                       | Vehicle Speed (mph, 0 to 100)           | 25                                      | 11        |
| //   | Grad  |   |                       | Road Gradient (%, 0 to 6)               |   | 11        |
| //   | Sep1  |   |                       | Centerline Separation (feet)            | 12                                      | //        |
| //   |       | with                                    | >>                    | (Usually 23' for 2-lane, 38'            |   | 11        |
| 11   |       | median                                  | >>                    | for 4-lane, 50' for 6-lane)             |   | //        |
| //   | Dist1 |   |                       | Distance from observer to the           | 100                                     | 11        |
| 11   |       |   |                       | nearest lane centerline (>50')          |   | //        |
| //   |       |   |                       | (used in calculations)                  |   | 11        |
| //   | Dist2 |   |                       | Dist. from ROW to NLC                   | 30                                      | 11        |
| //   |       |   |                       | *** CNEL @ 100' (SOFT)                  | 49                                      | 11        |
| //   | VOL   |   |                       | TOTAL Vehicle Volume (two-way)          | 2,160                                   | 11        |
| //   | ALPHA | 4                                       |                       | Hard site=0, Soft site=0.5              | 0                                       | //        |
|      |       |   |                       |   |   |           |

|       | DISTANCE FROM |          | FROM | F            | RESULT                                  | S                                       | DISTANCE FROM                           |   |
|-------|---------------|----------|------|--------------|---|---|---|---|
|       |               | Cntrline | ROW  |              |   |   | Centerline                              | ROW                                     |
|       |               | 16       | -20  | < hard       | 60 CNEL                                 | soft>                                   | 20                                      | -16                                     |
|       |               | 5        | -31  |              | 65 CNEL                                 |   | 9                                       | -27                                     |
|       |               | 2        | -34  |              | 70 CNEL                                 |   | 4                                       | -32                                     |
| 11    |               |          |      |              |   |   |   | 11                                      |
| //    | View          |          | V    | iew Angle of | Observer (                              | 180)                                    | 180                                     | //                                      |
| //    |               |          |      | SHIELDING    | G (adjust ou                            | tput by hand                            | i)                                      | 11                                      |
| //    |               |          |      | ~~~~~~       |   |   |   | //                                      |
| //    | Woods         | S        |      | Thickness of | of woodland                             | between                                 | 0                                       | //                                      |
| //    |               |          |      | observer a   | and road (fe                            | eet)                                    |   | //                                      |
| //    | Cover         |          |      | Percent vie  | w coverage                              | between                                 | 0                                       | 11                                      |
| //    |               |          |      | observer a   | and road (0-                            | -100)                                   |   | //                                      |
| //    | Rows          |          |      | Building rov | vs between                              | observer                                | 0                                       | //                                      |
| //    |               |          |      | and roadw    | /ay (0-4).                              |   |   | //                                      |
| ///// |               |          |      |              | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |

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#### West Jackman.: N. Elm Ave to Beech Ave - 2010 Without Project

|   |   | ///////// |
|---|---|-----------|
| //SpeedVehicle Speed (mph, 0 to 100)//GradRoad Gradient (%, 0 to 6) | 25                                      |           |
| // Sep1 Centerline Separation (feet)                                | 12                                      | //        |
| // with >> (Usually 23' for 2-lane, 38'                             | 12                                      | 11        |
| // median >> for 4-lane, 50' for 6-lane)                            |   | 11        |
| // Dist1 Distance from observer to the                              | 100                                     | 11        |
| // nearest lane centerline (>50')                                   | 100                                     |           |
| // (used in calculations)   |   |           |
| // Dist2 Dist. from ROW to NLC                                      | 30                                      | 11        |
| // *** CNEL @ 100' (SOFT)   | 48.45                                   | 11        |
|   | 1,901                                   | //        |
| // ALPHA Hard site=0, Soft site=0.5                                 | 0                                       | //        |
|   |   |           |
|   | STANCE FROM                             |           |
|   |   | ROW       |
| 14 -22 < hard 60 CNEL soft>   | 18                                      | -18       |
| 4 -31 <b>65 CNEL</b>  | 8                                       | -27       |
| 1 -34 <b>70 CNEL</b>  | 4                                       | -32       |
|   | 100                                     | //        |
| // View View Angle of Observer (180)                                | 180                                     | 11        |
| // SHIELDING (adjust output by hand)                                |   | //<br>//  |
| // Woods Thickness of woodland between                              | 0                                       | 11        |
| // observer and road (feet)   | 0                                       | 11        |
| // Cover Percent view coverage between                              | 0                                       | //        |
| // observer and road (0-100)  | 0                                       | //        |
| // Rows Building rows between observer                              | 0                                       | 11        |
| // and roadway (0-4).   | ·                                       |           |
|   | /////////////////////////////////////// |           |

# West Jackman.: Beech Ave to N. Sierra Hwy- 2010 Without Project

| ////// | //// ////// | ///// //////// //. | /// //////// ////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |
|--------|-------------|--------------------|---------------------|---|---|---|
| 11     | Speed       |                    |                     | Vehicle Speed (mph, 0 to 100)           | 25                                      | //                                      |
| //     | Grad        |                    |                     | Road Gradient (%, 0 to 6)               |   | //                                      |
| //     | Sep1        |                    |                     | Centerline Separation (feet)            | 12                                      | 11                                      |
| //     |             | with               | >>                  | (Usually 23' for 2-lane, 38'            |   | //                                      |
| //     |             | median             | >>                  | for 4-lane, 50' for 6-lane)             |   | 11                                      |
| 11     | Dist1       |                    |                     | Distance from observer to the           | 100                                     | //                                      |
| //     |             |                    |                     | nearest lane centerline (>50')          |   | 11                                      |
| //     |             |                    |                     | (used in calculations)                  |   | //                                      |
| //     | Dist2       |                    |                     | Dist. from ROW to NLC                   | 30                                      | 11                                      |
| 11     |             |                    |                     | *** CNEL @ 100' (SOFT)                  | 47.69                                   | 11                                      |
| //     | VOL         |                    |                     | TOTAL Vehicle Volume (two-way)          | 1,598                                   | 11                                      |
| //     | ALPHA       | 4                  |                     | Hard site=0, Soft site=0.5              | 0                                       | 11                                      |
|        |             |                    |                     |   |   |   |

|       |              | DISTANCE<br>Cntrline | ROW |   | ESULT        |   | DISTANCE FROM<br>Centerline             | ROW       |
|-------|--------------|----------------------|-----|---|--------------|---|---|-----------|
|       |              | 12                   | -24 | < hard                                  | 60 CNEL      | soft>                                   | 16                                      | -20       |
|       |              | 4                    | -32 |   | 65 CNEL      |   | 7                                       | -28       |
|       |              | 1                    | -35 |   | 70 CNEL      |   | 3                                       | -32       |
| //    |              |                      |     |   |              |   |   | 11        |
| 11    | View         |                      | Vi  | ew Angle of                             | Observer (*  | 180)                                    | 180                                     | 11        |
| //    |              |                      |     | SHIELDING                               | (adjust ou   | tput by hand                            | )                                       | //        |
| //    |              |                      |     | ~~~~~~~                                 |              |   |   | 11        |
| //    | Woods        | 6                    |     | Thickness of                            | of woodland  | between                                 | 0                                       | //        |
| 11    |              |                      |     | observer a                              | ind road (fe | et)                                     |   | 11        |
| //    | Cover        |                      |     | Percent view                            | w coverage   | between                                 | 0                                       | //        |
| //    |              |                      |     | observer a                              | ind road (0- | ·100)                                   |   | 11        |
| //    | Rows         |                      |     | Building rov                            | vs between   | observer                                | 0                                       | //        |
| 11    |              |                      |     | and roadw                               | ay (0-4).    |   |   | //        |
| ///// | ///// ////// | ///// //////// //    |     | /////////////////////////////////////// |              | /////////////////////////////////////// | /////////////////////////////////////// | ///////// |

// ALPHA

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#### West Kettering: N. Fern Ave to N Elm Ave - 2010 Without Project

| ///// |              |   | //// //////// //// |               |                |   | /////////////////////////////////////// | /////////////////////////////////////// |
|-------|--------------|---|--------------------|---------------|----------------|---|---|---|
| //    | Speed        |   |                    | Vehicle Spe   |                | ,                                       | 25                                      | //                                      |
| //    | Grad         |   |                    | Road Gradi    |                |   |   | //                                      |
| //    | Sep1         |   |                    | Centerline S  |                |   | 12                                      | //                                      |
| //    |              | with                                    | >>                 |               | 3' for 2-lan   |   |   | //                                      |
| //    |              | median                                  | >>                 | for 4-lane    | e, 50' for 6-l | ane)                                    |   | //                                      |
| 11    | Dist1        |   |                    | Distance fro  | om observe     | r to the                                | 100                                     | //                                      |
| //    |              |   |                    | nearest la    | ane centerli   | ine (>50')                              |   | 11                                      |
| //    |              |   |                    | (used in c    | alculations    | )                                       |   | 11                                      |
| //    | Dist2        |   |                    | Dist. from F  | OW to NLC      | C                                       | 30                                      | //                                      |
| //    |              |   |                    | ***           | CNEL @ 1       | 00' (SOFT)                              | 47.17                                   | //                                      |
| //    | VOL          |   |                    | TOTAL Veh     | icle Volum     | e (two-way)                             | 1,415                                   | //                                      |
| //    | ALPH         | Ą                                       |                    | Hard site=0   | , Soft site=   | 0.5                                     | 0                                       | //                                      |
|       |              | DISTANCE                                | FROM               | F             | ESULT          | S                                       | DISTANCE FROM                           |   |
|       |              | Cntrline                                | ROW                |               |                |   | Centerline                              | ROW                                     |
|       |              | 11                                      | -25                | < hard        | 60 CNEL        | soft>                                   | 15                                      | -21                                     |
|       |              | 3                                       | -32                |               | 65 CNEL        |   | 7                                       | -29                                     |
|       |              | 1                                       | -35                |               | 70 CNEL        |   | 3                                       | -33                                     |
| //    |              |   |                    |               |                |   |   | //                                      |
| //    | View         |   | ١                  | /iew Angle of | Observer (     | 180)                                    | 180                                     | //                                      |
| //    |              |   |                    | SHIELDING     | G (adjust ou   | tput by hand                            | (t                                      | //                                      |
| //    |              |   |                    | ~~~~~~        |                | , ,                                     | ,                                       | //                                      |
| //    | Woods        | S                                       |                    | Thickness of  | of woodland    | d between                               | 0                                       | //                                      |
| //    |              |   |                    | observer a    | and road (fe   | eet)                                    |   | 11                                      |
| //    | Cover        |   |                    | Percent vie   |                |   | 0                                       | //                                      |
| //    |              |   |                    |               | and road (0-   |   |   | 11                                      |
| //    | Rows         |   |                    | Building row  |                |   | 0                                       | 11                                      |
| //    |              |   |                    | and roadw     |                |   |   | //                                      |
|       | ///// ////// | ///// ///////////////////////////////// | //// //////// //// |               |                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |   | /////////                               |
|       |              |   |                    |               |                |   |   |   |

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# West Kettering: N Elm Ave to Beech Ave - 2010 Without Project

|   | West     | Kettering: N | Elm Ave to E | Beech Ave                               | - 2010 With                             | out Project                             |   |
|---|----------|--------------|--------------|---|---|---|---|
| /////////////////////////////////////// |          |              |              | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |
| / Spe                                   | ed       |              | Vehicle Spe  | ed (mph, 0                              | to 100)                                 | 25                                      | 11                                      |
| Gra                                     | d        |              | Road Gradi   | ent (%, 0 to                            | 6)                                      |   | //                                      |
| Sep                                     | 1        |              | Centerline S | Separation                              | (feet)                                  | 12                                      | 11                                      |
|   | with     | >>           | (Usually 2   | 3' for 2-lan                            | e, 38'                                  |   | 11                                      |
|   | median   | >>           | for 4-lane   | e, 50' for 6-l                          | ane)                                    |   | 11                                      |
| Dist                                    | 1        |              | Distance fro | om observe                              | r to the                                | 100                                     | //                                      |
|   |          |              | nearest la   | ane centerli                            | ine (>50')                              |   | 11                                      |
|   |          |              | (used in c   | alculations                             | )                                       |   |   |
| Dist                                    | 2        |              | Dist. from R | OW to NLC                               |   | 30                                      | 11                                      |
|   |          |              | ***          | CNEL @ 1                                | 00' (SOFT)                              | 43.05                                   | //                                      |
| VOL                                     |          |              | TOTAL Veh    | -                                       |   | 549                                     | 11                                      |
| ALP                                     | РНА      |              | Hard site=0  |   |   | 0                                       | 11                                      |
|   | DISTANCE | FROM         | R            | ESULT                                   | S                                       | DISTANCE FROM                           |   |
|   | Cntrline | ROW          |              |   |   | Centerline                              | ROW                                     |
|   | 4        | -32          | < hard       | 60 CNEL                                 | soft>                                   | 8                                       | -28                                     |
|   | 1        | -35          |              | 65 CNEL                                 |   | 4                                       | -32                                     |
|   | 0        | -35          |              | 70 CNEL                                 |   | 2                                       | -34                                     |
|   |          |              |              |   |   |   | 11                                      |
| Viev                                    | N        | V            | iew Angle of | Observer (                              | 180)                                    | 180                                     | 11                                      |
|   |          |              | SHIELDING    | G (adjust ou                            | tput by hand                            | (t                                      | //                                      |
|   |          |              | ~~~~~~       |   |   |   | 11                                      |
| Woo                                     | ods      |              | Thickness of | of woodland                             | between                                 | 0                                       |   |
|   |          |              | observer a   | and road (fe                            | et)                                     |   | //                                      |
| Cov                                     | rer      |              | Percent view | •                                       |   | 0                                       | //                                      |
|   |          |              |              | and road (0-                            |   |   | 11                                      |
| Row                                     | vs       |              | Building rov |   |   | 0                                       |   |
|   |          |              | and roadw    |   |   |   |   |
|   |          |              |              | • • •                                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | /////////////////////////////////////// |   |
|   |          |              |              |   | /////////////////////////////////////// |   | //////                                  |

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RBF Consulting. 27-Jan-03 JN 10-100183

# N. Fern Ave: Ave I to W. Jackman- 2010 Without Project

| 11111                  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 11111 1111111111111111111 |                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   | ///////////////////////////////////////  |   | ///////////////////////////////////////         |
|------------------------|---|---------------------------|-------------------------|---|--|---|---|
|                        | Speed                                   |                           |                         |   | eed (mph, 0 to 100)  | 25  |   |
| 11                     | Grad                                    |                           |                         |   | ient (%, 0 to 6)   | 20  | 11  |
| 11                     | Sep1                                    |                           |                         |   | Separation (feet)  | 12  | //  |
| 11                     | ocpi                                    | with                      | >>                      |   | 23' for 2-lane, 38'  | 12  | 11  |
| 11                     |   | median                    | >>                      |   | e, 50' for 6-lane)   |   | 11  |
| 11                     | Dist1                                   | modan                     |                         |   | om observer to the   | 100                                       |   |
| //                     | DIGT                                    |                           |                         |   | ane centerline (>50')  | 100                                       | 11  |
| 11                     |   |                           |                         |   | calculations)  |   |   |
|                        | Dist2                                   |                           |                         | •   | ROW to NLC   | 30  | 11  |
| 11                     |   |                           |                         |   | CNEL @ 100' (SOFT)   | 49.59                                     | 11  |
| //                     | VOL                                     |                           |                         |   | nicle Volume (two-way)   |   | 11  |
| 11                     | ALPH                                    | 4                         |                         |   | ), Soft site=0.5   | 0   | //  |
|                        |   |                           |                         |   |  |   |   |
|                        |   | DISTANCE F                | ROM                     | F   | RESULTS  | DISTANCE FROM                             |   |
|                        |   |                           |                         |   |  |   |   |
|                        |   | Cntrline                  | ROW                     |   |  | Centerline                                | ROW   |
|                        |   | Cntrline<br>18            | ROW<br>-17              | < hard  | 60 CNEL soft>  | Centerline<br>21                          | ROW<br>-14                                      |
|                        |   |                           |                         | < hard  | 60 CNEL soft><br>65 CNEL   |   |   |
|                        |   | 18                        | -17                     | < hard  |  | 21  | -14   |
| //                     |   | 18<br>6                   | -17<br>-30              | < hard  | 65 CNEL  | 21<br>10                                  | -14<br>-26                                      |
| //<br>//               | View                                    | 18<br>6                   | -17<br>-30<br>-34       |   | 65 CNEL  | 21<br>10                                  | -14<br>-26<br>-31                               |
|                        | View                                    | 18<br>6                   | -17<br>-30<br>-34       | iew Angle of  | 65 CNEL<br>70 CNEL   | 21<br>10<br>5<br>180                      | -14<br>-26<br>-31<br>//                         |
| //                     | View                                    | 18<br>6                   | -17<br>-30<br>-34       | iew Angle of  | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han  | 21<br>10<br>5<br>180                      | -14<br>-26<br>-31<br>//                         |
| <br>                   | View                                    | 18<br>6<br>2              | -17<br>-30<br>-34       | iew Angle of<br>SHIELDINC   | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han  | 21<br>10<br>5<br>180                      | -14<br>-26<br>-31<br>//<br>//                   |
| <br>  <br>             |   | 18<br>6<br>2              | -17<br>-30<br>-34       | iew Angle of<br>SHIELDINC<br>   | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han  | 21<br>10<br>5<br>180<br>d)                | -14<br>-26<br>-31<br>//<br>//                   |
| <br>  <br>  <br>       |   | 18<br>6<br>2              | -17<br>-30<br>-34       | iew Angle of<br>SHIELDING<br>Thickness<br>observer a<br>Percent vie   | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han<br>of woodland between<br>and road (feet)<br>w coverage between  | 21<br>10<br>5<br>180<br>d)                | -14<br>-26<br>-31<br>//<br>//<br>//<br>//<br>// |
| <br>  <br>  <br>       | Woods                                   | 18<br>6<br>2              | -17<br>-30<br>-34       | iew Angle of<br>SHIELDING<br>Thickness of<br>observer a<br>Percent vie<br>observer a                              | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)                        | 21<br>10<br>5<br>180<br>d)                | -14<br>-26<br>-31<br>//<br>//<br>//<br>//       |
| <br>  <br>  <br>  <br> | Woods                                   | 18<br>6<br>2              | -17<br>-30<br>-34       | iew Angle of<br>SHIELDING<br>Thickness<br>observer a<br>Percent vie<br>observer a<br>Building rov                 | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)<br>ws between observer | 21<br>10<br>5<br>180<br>d)                | -14<br>-26<br>-31<br>//<br>//<br>//<br>//<br>// |
| <br>  <br>  <br>  <br> | Woods<br>Cover<br>Rows                  | 18<br>6<br>2              | -17<br>-30<br>-34<br>Vi | iew Angle of<br>SHIELDING<br>Thickness of<br>observer a<br>Percent vie<br>observer a<br>Building row<br>and roadw | 65 CNEL<br>70 CNEL<br>Observer (180)<br>G (adjust output by han<br>of woodland between<br>and road (feet)<br>w coverage between<br>and road (0-100)<br>ws between observer | 21<br>10<br>5<br>180<br>d)<br>0<br>0<br>0 | -14<br>-26<br>-31<br>//<br>//<br>//<br>//<br>// |

#### N. Fern Ave: W. Jackman to W. Kettering - 2010 Without Project

|        |             | 14.1 611           | Ave. W. Jac         |   | . Rettering                             | - 2010 0010                             | iout i roject |     |   |
|--------|-------------|--------------------|---------------------|---|---|---|---------------|-----|---|
| ////// | //// ////// | ///// //////// /// | /// //////// ////// | /////////////////////////////////////// | /////////////////////////////////////// | /////////////////////////////////////// |               |     | 1 |
| //     | Speed       |                    |                     | Vehicle Spe                             | ed (mph, 0                              | to 100)                                 | 25            | 11  | 1 |
| //     | Grad        |                    |                     | Road Gradi                              | ent (%, 0 to                            | 6)                                      |               | 11  | 1 |
| //     | Sep1        |                    |                     | Centerline \$                           | Separation                              | (feet)                                  | 12            | 11  | 1 |
| //     |             | with               | >>                  | (Usually 2                              | 23' for 2-lan                           | e, 38'                                  |               | 11  | 1 |
| //     |             | median             | >>                  | for 4-lane                              | e, 50' for 6-l                          | ane)                                    |               | 11  | 1 |
| //     | Dist1       |                    |                     | Distance fro                            | om observe                              | r to the                                | 100           | 11  | 1 |
| //     |             |                    |                     | nearest l                               | ane centerli                            | ine (>50')                              |               | 11  | 1 |
| //     |             |                    |                     | (used in c                              | alculations                             | )                                       |               | 11  | 1 |
| //     | Dist2       |                    |                     | Dist. from F                            | ROW to NLC                              | 2                                       | 30            | 11  | 1 |
| 11     |             |                    |                     | ***                                     | CNEL @ 1                                | 00' (SOFT)                              | 50.34         | 11  | 1 |
| //     | VOL         |                    |                     | TOTAL Veh                               | nicle Volume                            | e (two-way)                             | 2,938         | 11  | 1 |
| 11     | ALPHA       | A                  |                     | Hard site=0                             | , Soft site=                            | 0.5                                     | 0             | -11 | 1 |
|        |             | DISTANCE           | FROM                | F                                       | RESULT                                  | S                                       | DISTANCE FRO  | м   |   |
|        |             | Cntrline           | ROW                 |   |   |   | Centerline    | ROW |   |
|        |             | 22                 | -14                 | < hard                                  | 60 CNEL                                 | soft>                                   | 24            | -12 |   |
|        |             | 7                  | -29                 |   | 65 CNEL                                 |   | 11            | -25 |   |
|        |             | 2                  | -34                 |   | 70 CNEL                                 |   | 5             | -31 |   |
| //     |             |                    |                     |   |   |   |               | 11  | 1 |
| //     | View        |                    | Vi                  | ew Angle of                             | Observer (                              | 180)                                    | 180           | li  | 1 |
|        |             |                    |                     |   |   |   |               |     |   |

SHIELDING (adjust output by hand)

Thickness of woodland between

Percent view coverage between

Building rows between observer

observer and road (0-100)

and roadway (0-4).

observer and road (feet)

~~~~~~~

11

 $\parallel$ 

 $\parallel$ 

11

 $\parallel$ 

 $\parallel$ 

11

11

0

0

0

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// //

11

11

11

 $\parallel$ 

11

11

Woods

Cover

Rows

### N. Elm Ave: Ave I to W. Jackman - 2010 Without Project

/////		///// //////// //	/// /////// /////	1 11111111111111111		///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
//	Speed	1		Vehicle Spe	eed (mph, 0 to	100)	25	<i>` 11</i>
//	Grad				ient (%, 0 to 6	,		11
//	Sep1				Separation (fe		12	//
//		with	>>		23' for 2-lane,			//
//		median	>>		e, 50' for 6-lan	/		//
//	Dist1				om observer to		100	//
//					ane centerline	e (>50')		//
//				•	calculations)			//
//	Dist2				ROW to NLC		30	//
//	8 500-00-00				CNEL @ 100		48.11	11
//	VOL				nicle Volume (		1,760	//
//	ALPH/	Ą		Hard site=0	), Soft site=0.5	5	0	11
		DIGTANOE	FDOM	-				
		DISTANCE		F	RESULTS		DISTANCE FROM	
		Controlino					Cantalina	DOW
		Cntrline	ROW	< hord	SO CHEL OF	- 64	Centerline	ROW
		13	-23	< hard	60 CNEL so	oft>	17	-19
		13 4	-23 -32	< hard	65 CNEL	oft>	17 8	-19 -28
		13	-23	< hard		oft>	17	-19 -28 -32
//	View	13 4	-23 -32 -35		65 CNEL 70 CNEL		17 8 4	-19 -28 -32 //
//	View	13 4	-23 -32 -35	iew Angle of	65 CNEL 70 CNEL Observer (180	0)	<b>17</b> <b>8</b> <b>4</b> 180	-19 -28 -32 //
 	View	13 4	-23 -32 -35	iew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (180 G (adjust output	0)	<b>17</b> <b>8</b> <b>4</b> 180	-19 -28 -32 // //
    		13 4 1	-23 -32 -35	iew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (186 G (adjust outpu	0) ut by hand	<b>17</b> <b>8</b> <b>4</b> 180	-19 -28 -32 // // //
    	View Woods	13 4 1	-23 -32 -35	iew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (180 G (adjust output of woodland be	0) ut by hand etween	<b>17</b> <b>8</b> <b>4</b> 180	-19 -28 -32 // // // //
       	Woods	13 4 1	-23 -32 -35	iew Angle of SHIELDINC Thickness of observer a	65 CNEL 70 CNEL Observer (180 G (adjust output of woodland bo and road (feet)	0) ut by hand etween )	<b>17</b> <b>8</b> <b>4</b> 180 )	-19 -28 -32 // // // //
       		13 4 1	-23 -32 -35	iew Angle of SHIELDING Thickness of observer a Percent vie	65 CNEL 70 CNEL Observer (180 G (adjust output of woodland be and road (feet) w coverage be	0) ut by hand etween ) etween	<b>17</b> <b>8</b> <b>4</b> 180	-19 -28 -32 // // // // //
       	Woods Cover	13 4 1	-23 -32 -35	iew Angle of SHIELDING Thickness of observer a Percent vie observer a	65 CNEL 70 CNEL Observer (186 6 (adjust output of woodland be and road (feet) w coverage be and road (0-10	0) ut by hand etween ) etween )0)	17 8 4 180 )) 0 0	-19 -28 -32 // // // // // //
          	Woods	13 4 1	-23 -32 -35	iew Angle of SHIELDING Thickness of observer a Percent vie observer a Building rov	65 CNEL 70 CNEL Observer (180 6 (adjust output of woodland be and road (feet) w coverage be and road (0-10 ws between ob	0) ut by hand etween ) etween )0)	<b>17</b> <b>8</b> <b>4</b> 180 )	-19 -28 -32 // // // // // // //
          	Woods Cover Rows	13 4 1	-23 -32 -35	view Angle of SHIELDING Thickness of observer a Percent vie observer a Building row and roadw	65 CNEL 70 CNEL Observer (180 6 (adjust output of woodland be and road (feet) w coverage be and road (0-10 ws between ob vay (0-4).	0) ut by hand etween ) etween 00) oserver	17 8 4 180 )) 0 0	-19 -28 -32 // // // // // //

# N. Elm Ave: W. Kettering to W. Lancaster - 2010 Without Project

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//	Speed		Vehicle Speed (mph, 0 to 100)	25	//
11	Grad		Road Gradient (%, 0 to 6)		11
//	Sep1		Centerline Separation (feet)	12	11
11	with	>>	(Usually 23' for 2-lane, 38'		//
//	media	n >>	for 4-lane, 50' for 6-lane)		11
//	Dist1		Distance from observer to the	100	//
11			nearest lane centerline (>50')		11
11			(used in calculations)		//
11	Dist2		Dist. from ROW to NLC	30	11
//			*** CNEL @ 100' (SOFT)	56.32	//
11	VOL		TOTAL Vehicle Volume (two-way)	11,653	11
//	ALPHA		Hard site=0, Soft site=0.5	0	//

		DISTANCE	FROM	F	RESULT	S	DISTANCE FROM	
		Cntrline	ROW				Centerline	ROW
		87	51	< hard	60 CNEL	soft>	60	24
		28	-8		65 CNEL		28	-8
		9	-27		70 CNEL		13	-23
11								11
//	View		V	iew Angle of	Observer (	180)	180	//
11				SHIELDING	G (adjust ou	tput by hand	1)	//
//				~~~~~~	-			11
11	Woods	;		Thickness of	of woodland	between	0	//
//				observer a	and road (fe	et)		11
11	Cover			Percent vie	w coverage	between	0	11
//				observer a	and road (0	-100)		11
11	Rows			Building rov	ws between	observer	0	11
//				and roadw	vay (0-4).			11
/////			//// //////// /////	/ /////////////////////////////////////	///////////////////////////////////////	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	///////////////////////////////////////	///////////////////////////////////////

### Beech Ave: North of West Jackman - 2010 Without Project

		Deec	IT AVE. NOT		at i roject	
///////		///// //////// ////			///////////////////////////////////////	///////////////////////////////////////
/ :	Speed			Vehicle Speed (mph, 0 to 100)	25	//
(	Grad			Road Gradient (%, 0 to 6)		//
	Sep1			Centerline Separation (feet)	12	11
1		with	>>	(Usually 23' for 2-lane, 38'		11
		median	>>	for 4-lane, 50' for 6-lane)		11
I	Dist1			Distance from observer to the	100	//
				nearest lane centerline (>50')		//
				(used in calculations)		11
	Dist2			Dist. from ROW to NLC	30	//
				*** CNEL @ 100' (SOFT)	42.12	//
1	VOL			TOTAL Vehicle Volume (two-way)	443	//
/	ALPHA	4		Hard site=0, Soft site=0.5	0	//
		DISTANCE F	ROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		3	-33	< hard 60 CNEL soft>	7	-29
		1	-35	65 CNEL	3	-33
		0	-36	70 CNEL	1	-34
						11
1	View		V	iew Angle of Observer (180)	180	11
				SHIELDING (adjust output by hand	d)	11
				~~~~~~		11
١	Woods			Thickness of woodland between	0	//
				observer and road (feet)		//
(	Cover			Percent view coverage between	0	//
				observer and road (0-100)		11
	Rows			Building rows between observer	0	//
				and roadway (0-4).		11
	/// //////	///// //////// ////				///////////////////////////////////////

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### Beech Ave: West Jackman to W. Kettering- 2010 Without Project

		Beech A	ve: west Ja	ackman to v	v. Kettering- 2010 Wi	thout Project	
//////	//// //////	///// //////// ///		///////////////////////////////////////	///////////////////////////////////////	/ /////////////////////////////////////	///////////////////////////////////////
11	Speed			Vehicle Spe	eed (mph, 0 to 100)	25	//
11	Grad			Road Gradi	ent (%, 0 to 6)		11
//	Sep1			Centerline S	Separation (feet)	12	//
//		with	>>	(Usually 2	23' for 2-lane, 38'		//
11		median	>>	for 4-lane	e, 50' for 6-lane)		//
11	Dist1			Distance fro	om observer to the	100	//
//				nearest l	ane centerline (>50')		//
//					alculations)		//
//	Dist2			Dist. from F	ROW to NLC	30	//
//				***	CNEL @ 100' (SOFT)	44.87	//
11	VOL			TOTAL Ver	nicle Volume (two-way	) 834	//
//	ALPHA	4		Hard site=0	, Soft site=0.5	0	//
		DISTANCE F	ROM	F	RESULTS	DISTANCE FROM	
		Cntrline	ROW			Centerline	ROW
		6	-30	< hard	60 CNEL soft>	10	-25
		2	-34		65 CNEL	5	-31
		1	-35		70 CNEL	2	-34
//							//
//	View		V	iew Angle of	Observer (180)	180	11
//				SHIELDING	G (adjust output by har	ld)	//
//				~~~~~~			11
11	Woods	;		Thickness of	of woodland between	0	11
//				observer a	and road (feet)		//
//	Cover				w coverage between	0	11
					1 1 (0 100)		

 $\parallel$ observer and road (0-100)  $\parallel$ Rows Building rows between observer 0 and roadway (0-4). //

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11

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#### N. Sierra Hwy: Ave I to West Jackman - 2010 Without Project

			·•····				
/////	///// //////	///// /////////////////////////////////		////_//////////////////////////////////	///////////////////////////////////////		///////////////////////////////////////
//	Speed			Vehicle Spe	eed (mph, 0 to 100)	45	//
//	Grad			Road Gradi	ient (%, 0 to 6)		//
//	Sep1			Centerline	Separation (feet)	42	//
11		with	>>	(Usually 2	23' for 2-lane, 38'		11
//		median	>>	for 4-lane	e, 50' for 6-lane)		//
11	Dist1			Distance fro	om observer to the	100	//
//				nearest l	ane centerline (>50')		//
//				(used in c	alculations)		//
//	Dist2			Dist. from F	ROW to NLC	30	//
//				***	CNEL @ 100' (SOFT)	61.45	11
//	VOL			TOTAL Veh	nicle Volume (two-way	) 11,254	//
//	ALPHA	4		Hard site=0	, Soft site=0.5	0	//
				_			
		DISTANCE		F	RESULTS	DISTANCE FROM	
		Cntrline	ROW			Centerline	ROW
		338	289	< hard		149	100
		107	58		65 CNEL	69	20
		34	-15		70 CNEL	32	-17
//						117 9 5 m 5 m	//
//	View			-	Observer (180)	180	//
//				SHIELDING	G (adjust output by har	nd)	
//				~~~~~~	-		//
//	Woods	6			of woodland between	0	//
//				observer a	and road (feet)		//

11 Cover // 11 Rows

11

and roadway (0-4). 

Percent view coverage between

Building rows between observer

observer and road (0-100)

11

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0

0

## Avenue I: N. Fern Ave. to N. Elm Ave.

		Avenu	ue I: N. Fern Ave. to N. Elm Ave.		
///////////////////////////////////////	/ //// ////////////////////////////////	//// //////// //////		///////////////////////////////////////	///////////////////////////////////////
Spee	d		Vehicle Speed (mph, 0 to 100)	40	11
Grad			Road Gradient (%, 0 to 6)		11
Sep1			Centerline Separation (feet)	48	//
	with	>>	(Usually 23' for 2-lane, 38'		11
	median	>>	for 4-lane, 50' for 6-lane)		//
Dist1			Distance from observer to the	100	11
			nearest lane centerline (>50')		//
			(used in calculations)		11
Dist2			Dist. from ROW to NLC	30	11
			*** CNEL @ 100' (SOFT)	62.51	11
VOL			TOTAL Vehicle Volume (two-way)	19,890	11
ALPH	IA		Hard site=0, Soft site=0.5	0	11
	DISTANCE	FROM	RESULTS	DISTANCE FROM	
	Cntrline	ROW		Centerline	ROW
	445	393	< hard 60 CNEL soft>	179	127
	141	89	65 CNEL	83	31
	44	-7	70 CNEL	39	-13
					11
View		Vi	ew Angle of Observer (180)	180	11
			SHIELDING (adjust output by hand	d)	11
			~~~~~~		11
Wood	ls		Thickness of woodland between	0	11
			observer and road (feet)		11
Cove	r		Percent view coverage between	0	11
			observer and road (0-100)		11
Rows	;		Building rows between observer	0	11
			and roadway (0-4).		11
///////////////////////////////////////	/ //// ////////////////////////////////				///////////////////////////////////////

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# Avenue I: N. Elm Ave. to N. Sierra Hwy.

				1 1111111111111111111111111111111111111	///////////////////////////////////////	///////////////////////////////////////
//	Speed			Vehicle Speed (mph, 0 to 100)	40	//
//	Grad			Road Gradient (%, 0 to 6)		//
//	Sep1			Centerline Separation (feet)	48	//
11	~	with	>>	(Usually 23' for 2-lane, 38'		11
//		median	>>	for 4-lane, 50' for 6-lane)		//
//	Dist1			Distance from observer to the	100	//
11				nearest lane centerline (>50')		//
11				(used in calculations)		//
//	Dist2			Dist. from ROW to NLC	30	11
//				*** CNEL @ 100' (SOFT)	62.49	11
//	VOL			TOTAL Vehicle Volume (two-way)	19,820	//
//	ALPHA	4		Hard site=0, Soft site=0.5	0	//
		DISTANCE	FROM	RESULTS	DISTANCE FROM	
		0 1 1	DOIN			
		Cntrline	ROW		Centerline	ROW
		Cntrline 444	80W 392	< hard 60 CNEL soft>	Centerline 178	ROW 127
				< hard 60 CNEL soft> 65 CNEL		A 15075 18105
		444	392		178	127
//		444 140	392 89	65 CNEL	178 83	127 31
// //	View	444 140	392 89 -7	65 CNEL	178 83	127 31 -13
	View	444 140	392 89 -7	65 CNEL 70 CNEL	<b>178</b> <b>83</b> <b>38</b> 180	127 31 -13
//	View	444 140	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180)	<b>178</b> <b>83</b> <b>38</b> 180	127 31 -13 //
    	View	444 140 44	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180) SHIELDING (adjust output by hand	<b>178</b> <b>83</b> <b>38</b> 180	127 31 -13 // //
    		444 140 44	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180) SHIELDING (adjust output by hand	<b>178</b> <b>83</b> <b>38</b> 180	127 31 -13 // //
// // // //		444 140 44	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between	<b>178</b> <b>83</b> <b>38</b> 180	127 31 -13 // // // // //
       	Woods	444 140 44	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180) SHIELDING (adjust output by hand ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<b>178</b> <b>83</b> <b>38</b> 180 1) 0	127 31 -13 // // // // // //
          	Woods	444 140 44	392 89 -7	65 CNEL 70 CNEL /iew Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between	<b>178</b> <b>83</b> <b>38</b> 180 1) 0	127 31 -13 // // // // //
       	Woods	444 140 44	392 89 -7	65 CNEL 70 CNEL Wiew Angle of Observer (180) SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between observer and road (0-100)	178 83 38 180 1) 0 0	127 31 -13 // // // // // //

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### West Jackman: N. Fern Ave. to N. Elm Ave. - Existing

		vv	est Jackma	n: N. Fern A	ve. to N. E	Im Ave Ex	isting		
/////	///// //////	///// //////// ///	// /////// //////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	1
//	Speed			Vehicle Spe	ed (mph, 0	to 100)	25	11	1
11	Grad			Road Grad	ent (%, 0 to	o 6)		11	1
//	Sep1			Centerline	Separation	(feet)	12	11	1
//		with	>>	(Usually 2	23' for 2-lan	e, 38'		11	
//		median	>>	for 4-lane	e, 50' for 6-l	ane)		11	1
//	Dist1			Distance fro	om observe	r to the	100	11	1
//				nearest l	ane centerli	ine (>50')		11	1
//				(used in c	alculations	)		11	1
//	Dist2			Dist. from F	ROW to NLC	C	30	11	1
//				***	CNEL @ 1	00' (SOFT)	48.67	11	1
//	VOL			TOTAL Veh	nicle Volum	e (two-way)	2,000	11	1
//	ALPHA	A Contraction of the second seco		Hard site=0	, Soft site=	0.5	0	11	1
		DISTANCE I	ROM	F	RESULT	S	DISTANCE FROM		
		Cntrline	ROW			-	Centerline	ROW	
		15	-21	< hard	60 CNEL	soft>	19	-17	
		5	-31		65 CNEL		9	-27	
		1	-34		70 CNEL		4	-32	
11								11	1
//	View		Vi	ew Angle of	Observer (	180)	180	11	1
//						tput by hand		11	1
11				~~~~~~		,,	,	11	1
//	Woods			Thickness of	of woodland	d between	0	11	1
//				observer a	and road (fe	eet)		11	1

 Woods
 Thickness of woodland between observer and road (feet)

 Cover
 Percent view coverage between observer and road (0-100)

 Rows
 Building rows between observer and roadway (0-4).

0

0

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## West Jackman: N. Elm Ave. to Beech Ave. - Existing

		///////////////////////////////////////
// Speed Vehicle Speed (mph, 0 to 100)	25	
// Grad Road Gradient (%, 0 to 6)	25	//
// Sep1 Centerline Separation (feet)	12	11
// with >> (Usually 23' for 2-lane, 38'	14	11
// median >> for 4-lane, 50' for 6-lane)		//
// Dist1 Distance from observer to the	100	//
// nearest lane centerline (>50')	100	11
// (used in calculations)		11
// Dist2 Dist. from ROW to NLC	30	11
// **** CNEL @ 100' (SOFT)	48.11	//
// VOL TOTAL Vehicle Volume (two-way)	1,760	//
// ALPHA Hard site=0, Soft site=0.5	0	//
	0	11
DISTANCE FROM RESULTS D	ISTANCE FROM	
	enterline	ROW
13 -23 < hard 60 CNEL soft>	17	-19
4 -32 <b>65 CNEL</b>	8	-28
1 -35 <b>70 CNEL</b>	4	-32
//	•	//
// View View Angle of Observer (180)	180	11
// SHIELDING (adjust output by hand)		
// ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
// Woods Thickness of woodland between	0	
// observer and road (feet)	· ·	
// Cover Percent view coverage between	0	//
// observer and road (0-100)	-	
// Rows Building rows between observer		
	0	
// Advest and roadway (0-4).	0	 // //

# West Jackman: Beech Ave. to N. Sierra Ave. - Existing

		We	st Jackman	: Beech Ave	e. to N. Sie	rra Ave E	xisting	
/////	//// //////	///// //////// ////		///////////////////////////////////////		///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
1	Speed			Vehicle Spe	ed (mph, 0	) to 100)	25	//
1	Grad			Road Gradi	ent (%, 0 to	o 6)		11
1	Sep1			Centerline S	Separation	(feet)	12	//
/		with	>>	(Usually 2	3' for 2-lan	e, 38'		11
1		median	>>	for 4-lane	e, 50' for 6-l	ane)		11
	Dist1			Distance fro	om observe	r to the	100	11
				nearest la	ane centerli	ine (>50')		11
				•	alculations	,		11
	Dist2			Dist. from F			30	//
					•	00' (SOFT)	47.36	11
	VOL					e (two-way)	1,480	11
	ALPHA	4		Hard site=0	, Soft site=	0.5	0	//
		DISTANCE F	ROM	R	ESULT	S	DISTANCE FROM	
		Cntrline	ROW				Centerline	ROW
		11	-25	< hard	60 CNEL	soft>	15	-21
		3	-32		65 CNEL		7	-29
		1	-35		70 CNEL		3	-33
								11
	View		Vi	iew Angle of	Observer (	180)	180	11
				SHIELDING	G (adjust ou	tput by hand	(t	//
				~~~~~~	•			//
	Woods	6		Thickness of	of woodland	d between	0	//
				observer a	and road (fe	eet)		//
	Cover			Percent vie	w coverage	e between	0	//
				observer a	and road (0-	-100)		//
	Rows			Building rov	vs between	observer	0	11
				and roadw	/ay (0-4).			11
////	//// //////	///// //////// ////	// //////// //////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////		///////////////////////////////////////

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# West Kettering: N. Fern Ave. to N. Elm Ave. - Existing

11111								
			// //////// /////					/////////
11	Speed				ed (mph, 0 to 10	)0)	25	//
//	Grad				ent (%, 0 to 6)			//
//	Sep1				Separation (feet)		12	//
11		with	>>		3' for 2-lane, 38'			11
11		median	>>		e, 50' for 6-lane)			//
 	Dist1				om observer to th ane centerline (>		100	// //
//				(used in c	alculations)			//
//	Dist2			Dist. from R	OW to NLC		30	//
//					CNEL @ 100' (S		46.83	//
//	VOL				icle Volume (two	o-way)	1,310	11
//	ALPHA	4		Hard site=0	, Soft site=0.5		0	//
		DISTANCE	FROM	R	ESULTS	D	DISTANCE FROM	
		Cntrline	ROW			C	Centerline	ROW
		10	-26	< hard	60 CNEL soft		Centerline 14	-22
			-26 -33	< hard	65 CNEL		14 6	
		10	-26	< hard			14	-22
//		10 3	-26 -33 -35		65 CNEL 70 CNEL		14 6 3	-22 -29
//	View	10 3	-26 -33 -35	/iew Angle of	65 CNEL 70 CNEL Observer (180)	>	14 6	-22 -29 -33
 	View	10 3	-26 -33 -35	/iew Angle of	65 CNEL 70 CNEL	>	14 6 3	-22 -29 -33 //
    		10 3 1	-26 -33 -35	/iew Angle of SHIELDING	65 CNEL 70 CNEL Observer (180) 6 (adjust output b	> by hand)	14 6 3	-22 -29 -33 //
    	View	10 3 1	-26 -33 -35	/iew Angle of SHIELDING ~~~~~~ Thickness of	65 CNEL 70 CNEL Observer (180) 6 (adjust output b	> by hand)	14 6 3	-22 -29 -33 // //
// // // //		10 3 1	-26 -33 -35	/iew Angle of SHIELDING ~~~~~~ Thickness o observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output b of woodland betw and road (feet)	> by hand) veen	14 6 3 180	-22 -29 -33 // // //
// // // //		10 3 1	-26 -33 -35	/iew Angle of SHIELDING  Thickness c observer a Percent view	65 CNEL 70 CNEL Observer (180) 6 (adjust output b of woodland betw and road (feet) w coverage betw	> by hand) veen veen	14 6 3 180	-22 -29 -33 // // // // // //
       	Woods Cover	10 3 1	-26 -33 -35	/iew Angle of SHIELDING Thickness of observer a Percent view observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output b of woodland betw and road (feet) w coverage betw and road (0-100)	> by hand) veen veen	14 6 3 180 0 0	-22 -29 -33 // // // // // // //
          	Woods	10 3 1	-26 -33 -35	/iew Angle of SHIELDING Thickness of observer a Percent view observer a Building row	65 CNEL 70 CNEL Observer (180) 6 (adjust output b of woodland betw and road (feet) w coverage betw and road (0-100) vs between obse	> by hand) veen veen	14 6 3 180	-22 -29 -33 // // // // // // // //
          	Woods Cover Rows	10 3 1	-26 -33 -35	/iew Angle of SHIELDING Thickness of observer a Percent view observer a Building row and roadw	65 CNEL 70 CNEL Observer (180) 6 (adjust output b of woodland betw and road (feet) w coverage betw and road (0-100) vs between obse ay (0-4).	> by hand) veen veen veen	14 6 3 180 0 0	-22 -29 -33 // // // // // // //

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# West Kettering: N. Elm Ave. to Beech Ave. - Existing

		VV	est Ketterir	ng: N. Elm Av	e. to beec	In Ave Ex	isting	
/////		///// //////// ///				///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
/	Speed			Vehicle Spe	ed (mph, 0	to 100)	25	//
/	Grad			Road Gradie	ent (%, 0 to	6)		11
1	Sep1			Centerline S	eparation	(feet)	12	//
1		with	>>	(Usually 23	3' for 2-lan	e, 38'		11
		median	>>	for 4-lane	, 50' for 6-l	ane)		11
	Dist1			Distance from	m observe	r to the	100	11
				nearest la	ne centerli	ne (>50')		//
				(used in ca	alculations)	)		11
	Dist2			Dist. from R	OW to NLC		30	//
				*** (	CNEL @ 1	00' (SOFT)	42.72	11
8	VOL			TOTAL Vehi	icle Volume	e (two-way)	508	11
9	ALPHA	Ą		Hard site=0,	Soft site=0	0.5	0	11
		DISTANCE F	ROM	R	ESULT	S	DISTANCE FROM	1
		Cntrline	ROW				Centerline	ROW
		4	-32	< hard	60 CNEL	soft>	7	-28
		1	-35		65 CNEL		3	-32
		0	-35		70 CNEL		2	-34
								11
3	View		V	iew Angle of C	Observer (*	180)	180	//
				SHIELDING	(adjust ou	tput by hand	(t	//
				~~~~~~				//
9	Woods	6		Thickness of	f woodland	l between	0	11
				observer a	nd road (fe	et)		11
0	Cover			Percent view	v coverage	between	0	11
				observer a	nd road (0-	-100)		11
	Rows			Building row			0	11
				and roadwa				//
/////	/// /////	///// //////// ///	// /////// /////	/ /////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////		///////////////////////////////////////

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RBF Consulting. 27-Jan-03 JN 10-100183

### N. Fern Ave.: Ave. I to W. Jackman - Existing

/////	///// //////	///// //////// ////		///////////////////////////////////////		111111111111111111111111111111111111111	///////////////////////////////////////
//	Speed			Vehicle Spe	eed (mph, 0 to 100)	25	//
//	Grad				ient (%, 0 to 6)		//
//	Sep1			Centerline \$	Separation (feet)	12	//
//		with	>>	(Usually 2	23' for 2-lane, 38'		//
//		median	>>	for 4-lane	e, 50' for 6-lane)		//
//	Dist1			Distance fro	om observer to the	100	//
//				nearest l	ane centerline (>50')		//
//					calculations)		11
//	Dist2				ROW to NLC	30	//
//					CNEL @ 100' (SOFT)	49.26	//
//	VOL				nicle Volume (two-way)	2,290	//
//	ALPHA	4		Hard site=0	), Soft site=0.5	0	//
		DISTANCE F		F	RESULTS	DISTANCE FROM	
		Cntrline 17 5 2	ROW -19 -30 -34	< hard	60 CNEL soft> 65 CNEL 70 CNEL	Centerline 20 9 4	ROW -15 -26 -31
//		17 5	-19 -30	< hard	65 CNEL	20 9	-15 -26
//	View	17 5	-19 -30 -34		65 CNEL	20 9	-15 -26 -31
// //	View	17 5	-19 -30 -34	ew Angle of	65 CNEL 70 CNEL	20 9 4 180	-15 -26 -31 //
    		17 5 2	-19 -30 -34	ew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (180) G (adjust output by hanc	20 9 4 180	-15 -26 -31 // //
    	View	17 5 2	-19 -30 -34	ew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between	20 9 4 180	-15 -26 -31 // // //
       	Woods	17 5 2	-19 -30 -34	ew Angle of SHIELDINC Thickness of observer a	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between and road (feet)	20 9 4 180 3) 0	-15 -26 -31 // // // //
       		17 5 2	-19 -30 -34	ew Angle of SHIELDINC Thickness of observer a Percent vie	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between and road (feet) w coverage between	20 9 4 180	-15 -26 -31 // // // // //
       	Woods	17 5 2	-19 -30 -34	ew Angle of SHIELDING Thickness of observer a Percent vie observer a	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between and road (feet) w coverage between and road (0-100)	20 9 4 180 3) 0 0	-15 -26 -31 // // // // //
          	Woods	17 5 2	-19 -30 -34	ew Angle of SHIELDING Thickness of observer a Percent vie observer a Building rov	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between and road (feet) w coverage between and road (0-100) ws between observer	20 9 4 180 3) 0	-15 -26 -31 // // // // // //
          	Woods Cover Rows	17 5 2	-19 -30 -34 Vi	ew Angle of SHIELDING Thickness of observer a Percent vie observer a Building row and roadw	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between and road (feet) w coverage between and road (0-100) ws between observer	20 9 4 180 3) 0 0 0	-15 -26 -31 // // // // //

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#### N. Fern Ave.: W. Jackman to W. Kettering- Existing

		R R	I. Fern Ave.	: W. Jackman to W. Kettering- Exist	sting	
//////	/// //////	///// //////// ///	// /////// //////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
1	Speed			Vehicle Speed (mph, 0 to 100)	25	//
/	Grad			Road Gradient (%, 0 to 6)		11
	Sep1			Centerline Separation (feet)	12	11
		with	>>	(Usually 23' for 2-lane, 38'		11
		median	>>	for 4-lane, 50' for 6-lane)		//
1	Dist1			Distance from observer to the	100	11
				nearest lane centerline (>50')		//
				(used in calculations)		11
	Dist2			Dist. from ROW to NLC	30	//
				*** CNEL @ 100' (SOFT)	50	11
1	VOL			TOTAL Vehicle Volume (two-way)	2,720	//
	ALPHA	4		Hard site=0, Soft site=0.5	0	11
		DISTANCE I	ROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		20	-16	< hard 60 CNEL soft>	23	-13
		6	-29	65 CNEL	11	-25
		2	-34	70 CNEL	5	-31
						//
	View		V	iew Angle of Observer (180)	180	
	View		V	iew Angle of Observer (180) SHIELDING (adjust output by hand		//
	View		V			 
	View Woods	5	V	SHIELDING (adjust output by hand		// // //
		3	V	SHIELDING (adjust output by hand 	))	    
		5	V	SHIELDING (adjust output by hand 	))	       
	Woods	3	V	SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between	0	          
	Woods Cover	3	V	SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between observer and road (0-100)	0	       
	Woods	3	V	SHIELDING (adjust output by hand  Thickness of woodland between observer and road (feet) Percent view coverage between	I) O O	          

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#### N. Elm Ave.: Ave. I to W. Jackman - Existing

/////	///// //////	///// //////// ////		///////////////////////////////////////	///////////////////////////////////////		///////////////////////////////////////
//	Speed			Vehicle Spe	eed (mph, 0 to 100)	25	//
//	Grad				ient (%, 0 to 6)		11
//	Sep1				Separation (feet)	12	//
//		with	>>		23' for 2-lane, 38'		//
//		median	>>		e, 50' for 6-lane)		//
//	Dist1				om observer to the	100	//
//					ane centerline (>50')		//
//					calculations)		11
//	Dist2				ROW to NLC	30	11
11					CNEL @ 100' (SOFT)		//
11	VOL				nicle Volume (two-way)		//
//	ALPH/	Ą		Hard site=0	), Soft site=0.5	0	11
		DISTANCE F	ROM	-	RESULTS	DISTANCE FROM	
		Cntrline	ROW	F	CESULIS	Centerline	ROW
		Chume	11000			Centennie	
		12		C hard	60 CNEL soft>		
		12	-24	< hard		16	-20
		4	-24 -32	< hard	65 CNEL	16 8	-20 -28
//			-24	< hard		16	-20 -28 -32
 	View	4	-24 -32 -35		65 CNEL 70 CNEL	16 8 3	-20 -28 -32
//	View	4	-24 -32 -35	ew Angle of	65 CNEL 70 CNEL Observer (180)	16 8 3 180	-20 -28 -32 //
 	View	4	-24 -32 -35	ew Angle of	65 CNEL 70 CNEL Observer (180) G (adjust output by han	16 8 3 180	-20 -28 -32 // //
    		4 1	-24 -32 -35	ew Angle of SHIELDING	65 CNEL 70 CNEL Observer (180) G (adjust output by han	<b>16</b> <b>8</b> <b>3</b> 180 rd)	-20 -28 -32 // // //
    	View Woods	4 1	-24 -32 -35	ew Angle of SHIELDING	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between	16 8 3 180	-20 -28 -32 // // // //
       		4 1 s	-24 -32 -35	ew Angle of SHIELDING Thickness observer a	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between and road (feet)	<b>16</b> <b>8</b> <b>3</b> 180 rd)	-20 -28 -32 // // //
       	Woods	4 1 s	-24 -32 -35	ew Angle of SHIELDING Thickness observer a Percent vie	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between and road (feet) w coverage between	16 8 3 180 d)	-20 -28 -32 // // // // // //
       	Woods	4 1 s	-24 -32 -35	ew Angle of SHIELDING Thickness observer a Percent vie observer a	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between and road (feet) w coverage between and road (0-100)	16 8 3 180 d)	-20 -28 -32 // // // // // // //
       	Woods Cover	4 1 s	-24 -32 -35	ew Angle of SHIELDING Thickness observer a Percent vie observer a Building row	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between and road (feet) w coverage between and road (0-100) ws between observer	<b>16</b> <b>8</b> <b>3</b> 180 Id) 0	-20 -28 -32 // // // // // //
          	Woods Cover Rows	4 1 s	-24 -32 -35 Vi	ew Angle of SHIELDING Thickness observer a Percent vie observer a Building row and roadw	65 CNEL 70 CNEL Observer (180) G (adjust output by han of woodland between and road (feet) w coverage between and road (0-100) ws between observer	16 8 3 180 d) 0 0 0	-20 -28 -32 // // // // // // // //

#### N Elm Ave · Ave I to W Jackman - Existing

			N. Elm Av	ve.: Ave. I to W. Jackman - Existin	g	
/////	///// //////	///// //////// //	/// /////// //////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
1	Speed			Vehicle Speed (mph, 0 to 100)	25	//
7	Grad			Road Gradient (%, 0 to 6)		//
1	Sep1			Centerline Separation (feet)	12	//
		with	>>	(Usually 23' for 2-lane, 38'		//
		median	>>	for 4-lane, 50' for 6-lane)		//
	Dist1			Distance from observer to the	100	11
				nearest lane centerline (>50')		11
				(used in calculations)		11
	Dist2			Dist. from ROW to NLC	30	//
				*** CNEL @ 100' (SOFT)	47.78	11
	VOL			TOTAL Vehicle Volume (two-way)	1,630	11
	ALPHA	4		Hard site=0, Soft site=0.5	0	//
		DISTANCE	FROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		12	-24	< hard 60 CNEL soft>	16	-20
		4	-32	65 CNEL	8	-28
		1	-35	70 CNEL	3	-32
						//
	View		Vi	ew Angle of Observer (180)	180	11
				SHIELDING (adjust output by hand	1)	//
				~~~~~~		11
	Woods	3		Thickness of woodland between	0	//
				observer and road (feet)		//
	Cover			Percent view coverage between	0	11
				observer and road (0-100)		//
	Rows			Building rows between observer	0	11
				and roadway (0-4).		//
111	///////////////////////////////////////	///// //////// //	/// /////// //////			/////////

-

#### N. Elm Ave.: W. Kettering to W. Lancaster - Existing

/////		///// //////// ////		///////////////////////////////////////			///////////////////////////////////////
//	Speed			_	eed (mph, 0 to 100)	25	//
//	Grad				ient (%, 0 to 6)		//
//	Sep1				Separation (feet)	12	//
//		with	>>		23' for 2-lane, 38'		11
//		median	>>		e, 50' for 6-lane)		11
//	Dist1				om observer to the	100	//
//					ane centerline (>50')		//
//					alculations)		//
//	Dist2				ROW to NLC	30	11
11					CNEL @ 100' (SOF		//
11	VOL				nicle Volume (two-wa		11
//	ALPH/	4		Hard site=0	, Soft site=0.5	0	//
		DISTANCE F	ROM	F	RESULTS	DISTANCE FROM	
					200210		
		Cntrline	ROW			Centerline	ROW
		Cntrline 80	ROW 45	< hard	60 CNEL soft>	Centerline 57	ROW 21
				< hard	60 CNEL soft> 65 CNEL		
		80	45	< hard		57	21
//		80 25	45 -10	< hard	65 CNEL	57 27	21 -9
// //	View	80 25	45 -10 -28		65 CNEL	57 27	21 -9 -23
	View	80 25	45 -10 -28	ew Angle of	65 CNEL 70 CNEL	57 27 12 180	21 -9 -23 //
//	View	80 25	45 -10 -28	ew Angle of	65 CNEL 70 CNEL Observer (180) 6 (adjust output by ha	57 27 12 180	21 -9 -23 //
 	View	80 25 8	45 -10 -28	ew Angle of SHIELDINC	65 CNEL 70 CNEL Observer (180) 6 (adjust output by ha	57 27 12 180 and)	21 -9 -23 // //
    		80 25 8	45 -10 -28	ew Angle of SHIELDINC ~~~~~~ Thickness of	65 CNEL 70 CNEL Observer (180) 6 (adjust output by ha	57 27 12 180 and)	21 -9 -23 // // //
       		80 25 8	45 -10 -28	ew Angle of SHIELDINC Thickness of observer a Percent vie	65 CNEL 70 CNEL Observer (180) 6 (adjust output by ha of woodland betweer and road (feet) w coverage betweer	57 27 12 180 and) 0	21 -9 -23 // // // //
       	Woods	80 25 8	45 -10 -28	ew Angle of SHIELDING Thickness of observer a Percent vie observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hat of woodland between and road (feet) w coverage between and road (0-100)	57 27 12 180 and) 0 1 0	21 -9 -23 // // // //
          	Woods	80 25 8	45 -10 -28	ew Angle of SHIELDING Thickness of observer a Percent vie observer a Building rov	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hat of woodland between and road (feet) w coverage between and road (0-100) ws between observer	57 27 12 180 and) 0 1 0	21 -9 -23 // // // // // // //
          	Woods Cover Rows	80 25 8	45 -10 -28 Vi	ew Angle of SHIELDING Thickness of observer a Percent vie observer a Building row and roadw	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hat of woodland between and road (feet) w coverage between and road (0-100) ws between observer (ay (0-4).	57 27 12 180 and) 0 1 0	21 -9 -23 // // // // // //

-

#### Beech Ave : North of W. Jackman - Existing

			Beech Av	/e.: North of W. Jackman - Existir	ng	
/////	///// //////	///// /////////////////////////////////		///////////////////////////////////////		///////////////////////////////////////
//	Speed			Vehicle Speed (mph, 0 to 100)	25	//
//	Grad			Road Gradient (%, 0 to 6)		//
//	Sep1			Centerline Separation (feet)	12	//
//		with	>>	(Usually 23' for 2-lane, 38'		11
//		median	>>	for 4-lane, 50' for 6-lane)		//
//	Dist1			Distance from observer to the	100	//
//				nearest lane centerline (>50')		//
//				(used in calculations)		//
//	Dist2			Dist. from ROW to NLC	30	//
//				*** CNEL @ 100' (SOFT)	41.79	//
//	VOL			TOTAL Vehicle Volume (two-way)	410	//
//	ALPH/	4		Hard site=0, Soft site=0.5	0	11
		DISTANCE		RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		3	-33	< hard 60 CNEL soft>	6	-29
		1	-35	65 CNEL	3	-33
		0	-36	70 CNEL	1	-34
//						//
//	View		Vi	ew Angle of Observer (180)	180	//
//				SHIELDING (adjust output by hand	d)	//
//	1002-10			~~~~~~		//
//	Woods	6		Thickness of woodland between	0	//
//				observer and road (feet)		//
//	Cover			Percent view coverage between	0	//
//	-			observer and road (0-100)		//
//	Rows			Building rows between observer	0	//
//				and roadway (0-4).		//
/////				///////////////////////////////////////		///////////////////////////////////////

~

#### Beech Ave.: W. Jackman to W. Kettering - Existing

/////	//// //////	///// /////// ////		///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
//	Speed			_ '	eed (mph, 0 to 100)	25	11
//	Grad				ent (%, 0 to 6)		//
//	Sep1				Separation (feet)	12	11
//		with	>>		23' for 2-lane, 38'		//
//		median	>>		e, 50' for 6-lane)		//
//	Dist1			Distance fro	om observer to the	100	//
//					ane centerline (>50')		//
//					alculations)		//
//	Dist2				ROW to NLC	30	//
//					CNEL @ 100' (SOFT)	44.53	11
//	VOL				nicle Volume (two-way)	772	//
//	ALPHA	4		Hard site=0	, Soft site=0.5	0	11
		DISTANCE F	ROM	R	RESULTS	DISTANCE FROM	
		Cntrline 6 2	ROW -30 -34	< hard	60 CNEL soft> 65 CNEL 70 CNEL	Centerline 10 5 2	ROW -26 -31
//		6	-30	< hard		10	-26 -31 -34
 	View	6 2	-30 -34 -35		65 CNEL 70 CNEL	10 5 2	-26 -31 -34 //
//	View	6 2	-30 -34 -35	ew Angle of	65 CNEL 70 CNEL Observer (180)	10 5 2 180	-26 -31 -34 //
 	View	6 2	-30 -34 -35	ew Angle of	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand	10 5 2 180	-26 -31 -34 // //
    		6 2 1	-30 -34 -35	ew Angle of SHIELDING	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand	<b>10</b> <b>5</b> <b>2</b> 180	-26 -31 -34 // //
    	View Woods	6 2 1	-30 -34 -35	ew Angle of SHIELDING ~~~~~~ Thickness of	65 CNEL 70 CNEL Observer (180) G (adjust output by hand of woodland between	10 5 2 180	-26 -31 -34 // // //
       		6 2 1	-30 -34 -35	ew Angle of SHIELDING  Thickness o observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand of woodland between and road (feet)	<b>10</b> <b>5</b> <b>2</b> 180	-26 -31 -34 // //
       	Woods	6 2 1	-30 -34 -35	ew Angle of SHIELDING Thickness of observer a Percent vie	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand of woodland between and road (feet) w coverage between	<b>10</b> <b>5</b> <b>2</b> 180 3) 0	-26 -31 -34 // // // // //
       	Woods	6 2 1	-30 -34 -35	ew Angle of SHIELDING Thickness of observer a Percent vie observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand of woodland between and road (feet) w coverage between and road (0-100)	<b>10</b> <b>5</b> <b>2</b> 180 3) 0	-26 -31 -34 // // // //
       	Woods	6 2 1	-30 -34 -35	ew Angle of SHIELDING Thickness of observer a Percent vie observer a	65 CNEL 70 CNEL Observer (180) 6 (adjust output by hand of woodland between and road (feet) w coverage between and road (0-100) vs between observer	10 5 2 180 3) 0 0	-26 -31 -34 // // // // // //

#### N. Sierra Hwy .: Ave. I to W. Jackman - Existing

			N. Sierra H	lwy.: Ave. I to W. Jackman - Existi	ng	
//////	//// //////				///////////////////////////////////////	///////////////////////////////////////
//	Speed			Vehicle Speed (mph, 0 to 100)	45	//
//	Grad			Road Gradient (%, 0 to 6)		//
//	Sep1			Centerline Separation (feet)	42	//
//		with	>>	(Usually 23' for 2-lane, 38'		//
//		median	>>	for 4-lane, 50' for 6-lane)		//
//	Dist1			Distance from observer to the	100	//
//				nearest lane centerline (>50')		//
//				(used in calculations)		//
//	Dist2			Dist. from ROW to NLC	30	//
11				*** CNEL @ 100' (SOFT)	61.12	//
//	VOL			TOTAL Vehicle Volume (two-way)	10,420	//
//	ALPHA	4		Hard site=0, Soft site=0.5	0	//
		DISTANCE	FROM	RESULTS	DISTANCE FROM	
		Cntrline	ROW		Centerline	ROW
		313	264	< hard 60 CNEL soft>	142	92
		99	50	65 CNEL	66	17
		31	-18	70 CNEL	30	-19
11						//
//	View		V	iew Angle of Observer (180)	180	//
//				SHIELDING (adjust output by hand	1)	//
//				~~~~~~		//
//	Woods	6		Thickness of woodland between	0	//
//				observer and road (feet)		//
//	Cover			Percent view coverage between	0	//
11				observer and road (0-100)		//
//	Rows			Building rows between observer	0	//
//				and roadway (0-4).		11
//////					///////////////////////////////////////	///////////////////////////////////////

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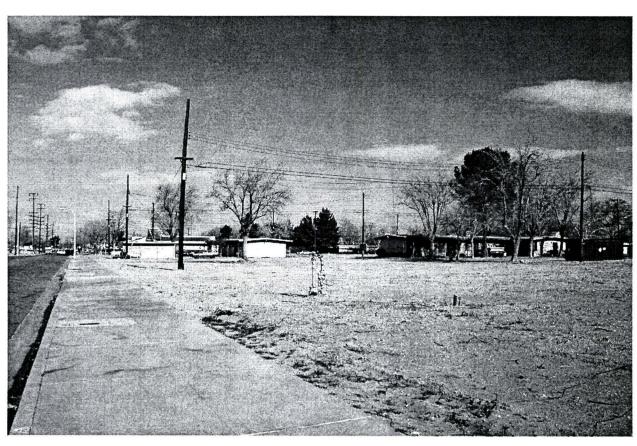
		_		
Site Number: 1	Date:	01/09	By:	RG & SH
Time: 9:35-9:55 AM			JN	10102041
General Location: Va Fern Avenue betwe				
Conditions: Mild win	ds			
Leq = <b>56.1</b>				
Ldn-a = <b>56.1</b>		CNEL =	= 60	.9
Lmin = <b>49.3</b>				
Max-a = <b>69.3</b>				
Peak-a = <b>79.1</b>				

Source of Peak Noise: roadway (Fern Avenue) and City Hall parking lot

#### **Picture of Location**

#### Directions:

- 1. Mount noise meter to tri-pod (microphone must be 5.5 feet from the ground).
- 2. Point microphone at a 70-degree angle from the noise source.
- 3. Turn On (lower left button) wait for "S" to stop blinking.
- Press "Leq"
   Press "R/S"
- 6. Let stand for noise reading to occur (15 min.) Be QUIET
- 7. Press "R/S"
- 8. Write down noise readings (Starts with LEQ)
- 9. Press "Shift", then press "Ldn"- Write down noise reading.
- 10. Press "Shift", then press "Lmin"- Write down noise reading.
- 11. Press "Lmax"- Write down noise reading.
- 12. Press "PEAK" Write down noise reading.
- 13. Press "Ln" Write down noise reading.
- 14. Press "Shift", then Press "Reset"
- 15. Press "Reset" again. Go to next site. (Start at #3)



Site Number: 2	/09	By: <b>RG &amp; SH</b>				
Time: 10:10-10:30 A		JN 10102041				
General Location: Southwest corner of Cedar and Jackman						
Conditions: Mild win	ds					
Leq = <b>59.5</b>						
Ldn-a = <b>59.5</b>		CNEL :	= 64.3			
Lmin = <b>48.3</b>						
Max-a = <b>75.5</b>						
Peak-a = <b>87.5</b>			5			
Source of Peak Noise	e: Fire er	gines				

#### Directions:

- 1. Mount noise meter to tri-pod (microphone must be 5.5 feet from the ground).
- Point microphone at a 70-degree angle from the noise source.
   Turn On (lower left button) wait for "S" to stop blinking.

4. Press "Leg"

- 5. Press "R/S"
- 6. Let stand for noise reading to occur (15 min.) Be QUIET
- 7. Press "R/S"

- Press POS
   Write down noise readings (Starts with LEQ)
   Press "Shift", then press "Ldn"- Write down noise reading.
   Press "Shift", then press "Lmin"- Write down noise reading.
   Press "Lmax"- Write down noise reading.
   Press "PEAK" Write down noise reading.
   Press "Ln" Write down noise reading.
   Press "Ln" Write down noise reading.

- 14. Press "Shift", then Press "Reset"
- 15. Press "Reset" again. Go to next site. (Start at #3)

#### **Picture of Location**

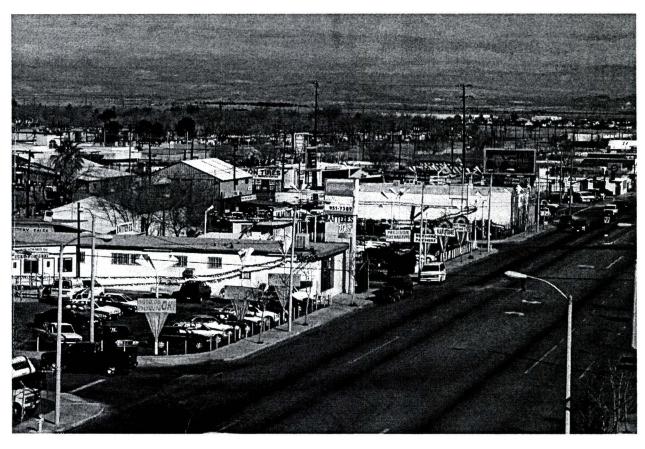


Site Number: 3	Date: 01/	09	By: <b>RG &amp; SH</b>
Time: <b>10:45-11:05</b>	AM		JN 10102041
General Location: between lvesbroo			-
Conditions: Mild w	inds		
Leq = <b>70.5</b>			
Ldn-a = <b>80.51</b>		CNEL =	80.5
Lmin = <b>50.2</b>			
Max-a = <b>87.8</b>			
Peak-a = <b>100.1</b>			
Source of Peak No	ise: car hor	n; truck	traffic

#### Directions:

- 1. Mount noise meter to tri-pod (microphone must be 5.5 feet from the ground).
- 2. Point microphone at a 70-degree angle from the noise source.
- 3. Turn On (lower left button) wait for "S" to stop blinking.
- Press "Leq"
   Press "R/S"
- 6. Let stand for noise reading to occur (15 min.) Be QUIET
- 7. Press "R/S"
- 8. Write down noise readings (Starts with LEQ)
- 9. Press "Shift", then press "Ldn"- Write down noise reading.
- Press "Shift", then press "Lmin"- Write down noise reading.
   Press "Lmax"- Write down noise reading.
- 12. Press "PEAK" Write down noise reading.

- Press "EAR Write down hoise reading.
   Press "Ln" Write down noise reading.
   Press "Shift", then Press "Reset"
   Press "Reset" again. Go to next site. (Start at #3)



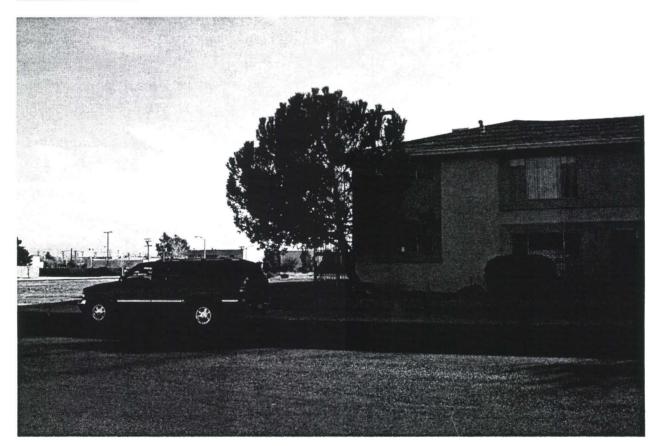
#### **Picture of Location**

Site Number: 4	/09	By:	RG & SH				
Time: 2:30-2:50 PM	JN	10102041					
General Location: Kettering between Fig and Elm Avenues							
Conditions: Mild win	ds						
Leq = <b>55.2</b>							
Ldn-a = <b>65.2</b>		CNEL :	= 65	.2			
Lmin = <b>46.6</b>							
Max-a = <b>71.3</b>							
Peak-a = <b>83.4</b>							
Source of Peak Nois	e: roadw	ay; train					

#### **Picture of Location**

#### Directions:

- 1. Mount noise meter to tri-pod (microphone must be 5.5 feet from the ground).
- 2. Point microphone at a 70-degree angle from the noise source.
- 3. Turn On (lower left button) wait for "S" to stop blinking. 4. Press "Leg"
- 5. Press "R/S" 6. Let stand for noise reading to occur (15 min.) Be QUIET
- 7. Press "R/S"
- 8. Write down noise readings (Starts with LEQ)
- Press "Shift", then press "Ldn"- Write down noise reading.
   Press "Shift", then press "Lmin"- Write down noise reading.
- 11. Press "Lmax"- Write down noise reading.
- 12. Press "PEAK" Write down noise reading.
- 13. Press "Ln" Write down noise reading.
- 14. Press "Shift", then Press "Reset"
- 15. Press "Reset" again. Go to next site. (Start at #3)



Site Number: <b>5</b>	Date: 01	/09	By:	RG & SH	
Time: 3:05-3:25 PM			JN	10102041	
General Location: <b>So</b> Cedar	outheast	corner c	of Av	venue I ar	nd
Conditions: Mild win	ds				
Leq = <b>68.6</b>					
Ldn-a = <b>78.6</b>		CNEL =	= 78	.6	
Lmin = <b>55.2</b>					
Max-a = <b>81.7</b>					
Peak-a = <b>109.2</b>					

#### Directions:

- 1. Mount noise meter to tri-pod (microphone must be 5.5 feet from the ground).
- 2. Point microphone at a 70-degree angle from the noise source.
- 3. Turn On (lower left button) wait for "S" to stop blinking.
- Press "Leq"
   Press "R/S"
- 6. Let stand for noise reading to occur (15 min.) Be QUIET
- 7. Press "R/S"
- 8. Write down noise readings (Starts with LEQ)
   9. Press "Shift", then press "Ldn"- Write down noise reading.
- Press "Shift", then press "Lmin"- Write down noise reading.
   Press "Lmax"- Write down noise reading.
- 12. Press "PEAK" Write down noise reading.
- 13. Press "Ln" Write down noise reading. 14. Press "Shift", then Press "Reset"
- 15. Press "Reset" again. Go to next site. (Start at #3)

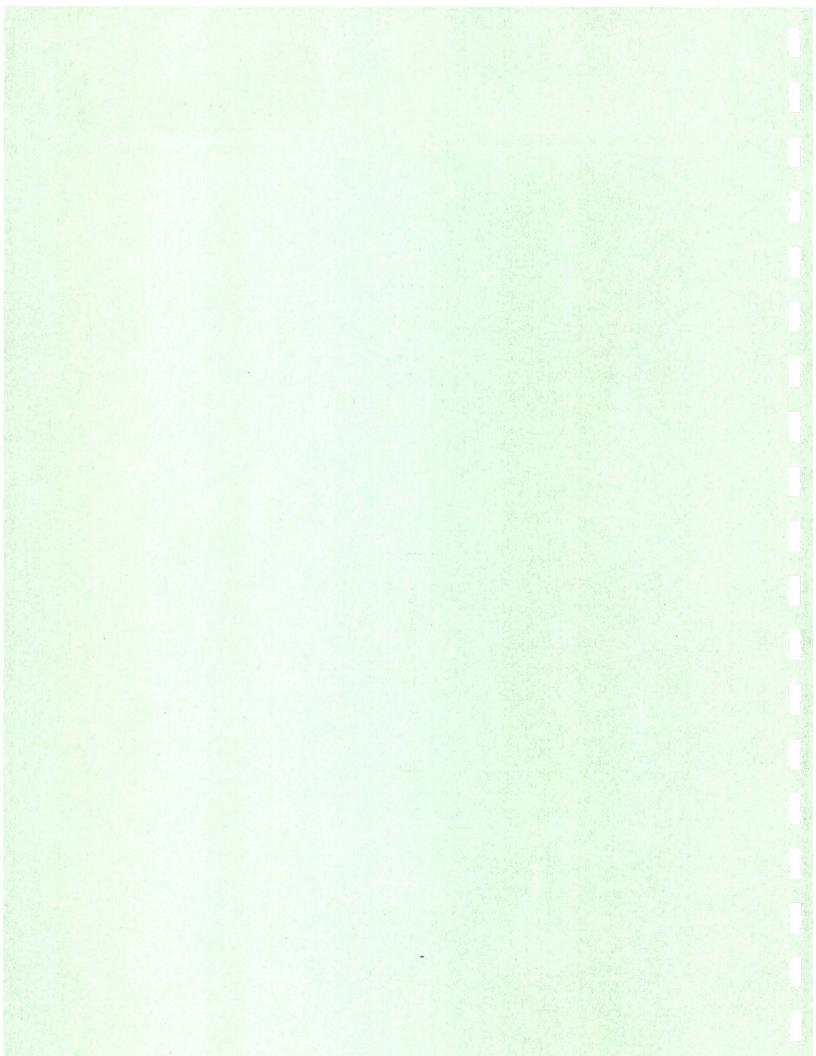
#### **Picture of Location**

Source of Peak Noise: roadway traffic



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# **15.6 Historical Resources Survey Report**



# HISTORICAL RESOURCES SURVEY REPORT

## NORTH DOWNTOWN NEIGHBORHOOD VISION PLAN

City of Lancaster Los Angeles County, California

Submitted to:

Glenn Lajoie RBF Consulting 14725 Alton Parkway Irvine, CA 92618-2069

Submitted by:

Bai Tang, Principal Investigator Michael Hogan, Principal Investigator CRM TECH 4472 Orange Street Riverside, CA 92501

January 27, 2003

CRM TECH Contract #875/977 Approximately 110 Acres USGS Lancaster West, Calif., 7.5' Quadrangle Section 15, T7N R12W, San Bernardino Base Meridian

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#### MANAGEMENT SUMMARY

Between September and January, 2003, at the request of RBF Consulting, CRM TECH performed a historical resources survey on the Area of Potential Effects (APE) for the proposed North Downtown Neighborhood Vision Plan project in the City of Lancaster, Los Angeles County, California. The APE is bounded in general by Avenue I on the north, Sierra Highway on the east, Kettering Street on the south, and 10th Street on the west, encompassing the northwestern portion of Lancaster's downtown area. It lies within the north half of Section 15, T7N R12W, San Bernardino Base Meridian. The Survey is a part of the environmental review process for the proposed undertaking. The City of Lancaster, as the project proponent and the lead agency, initiated the survey pursuant to the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act.

The purpose of the survey is to assist the City of Lancaster in determining whether the proposed undertaking would have an effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by Calif. PRC §21084.1, that may exist within the APE. In order to identify such historic properties, CRM TECH initiated a historical/archaeological resources records search, pursued historical background research, consulted with representatives of Native Americans and the local community, and carried out a systematic field survey. Since the APE has long been fully developed as a part of Lancaster's historical downtown core, the survey procedures were focused on the identification and evaluation of historic-era archaeological sites and buildings/structures that are more than 45 years old and retain at least a recognizable level of historic characteristics.

As a result of the survey, a total of 81 historic-era buildings or groups of buildings were identified within the APE, representing 54 single-family residences, 11 multiple-family residences, 7 commercial buildings, and 9 religious properties, including 2 churches and 2 church-operated schools. Among these, only one single-family residence, the former Rowell family residence located at 45007 N. Elm Avenue, has been determined to meet the official definition of a "historic property" or a "historical resource." No further cultural resources considerations, therefore, are mandated by Section 106 and CEQA on the other 80 buildings or groups of buildings recorded and evaluated during this study.

Under currently plans, the proposed undertaking calls for the demolition of the former Rowell residence, which would constitute an adverse effect on this "historic property"/"historical resource" under Section 106 and CEQA guidelines. In order to prevent, reduce, or mitigate the effect, CRM TECH recommends the following options to the City of Lancaster:

- That the former Rowell residence be rehabilitated for adaptive use, if feasible; or
- If physical impact is unavoidable, that the historical and architectural data about the former Rowell residence be preserved through comprehensive documentation, and that the demolition and other ground-disturbing activities be monitored by a qualified archaeologist.

No other historical/archaeological investigations are recommended for the proposed undertaking. However, if buried archaeological remains are discovered during any earthmoving operations, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

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#### INTRODUCTION

Between September and January, 2003, at the request of RBF Consulting, CRM TECH performed a historical resources survey on the Area of Potential Effects (APE) for the proposed North Downtown Neighborhood Vision Plan project in the City of Lancaster, Los Angeles County, California (Fig. 1). The APE is bounded in general by Avenue I on the north, Sierra Highway on the east, Kettering Street on the south, and 10th Street on the west, encompassing the northwestern portion of Lancaster's downtown area (Fig. 2). It lies within the north half of Section 15, T7N R12W, San Bernardino Base Meridian (Fig. 2). The survey is a part of the environmental review process for the proposed undertaking. The City of Lancaster, as the project proponent and the lead agency, initiated the survey pursuant to the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act.

The purpose of the survey is to assist the City of Lancaster in determining whether the proposed undertaking would have an effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by Calif. PRC §21084.1, that may exist in or near the APE. In order to identify such historic properties, CRM TECH initiated a historical/archaeological resources records search, pursued historical background research, consulted with representatives of Native Americans and the local community, and carried out a systematic field survey. The following report is a complete account of the methods and results of the various avenues of research, and the final conclusion of the study.

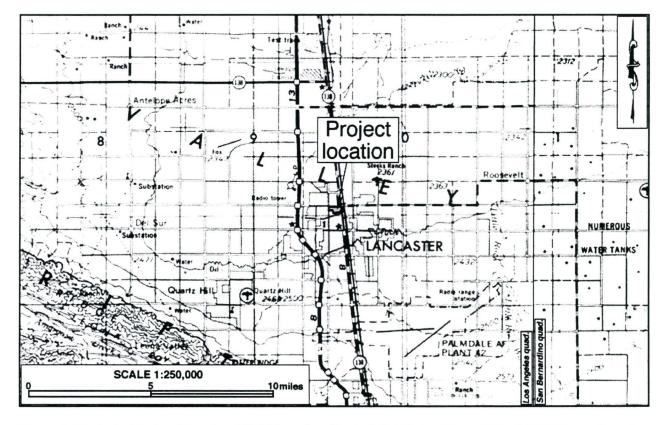


Figure 1. Project vicinity. (Based on USGS Los Angeles and San Bernardino, Calif., 1:250,000 quadrangles [USGS 1969; 1975])

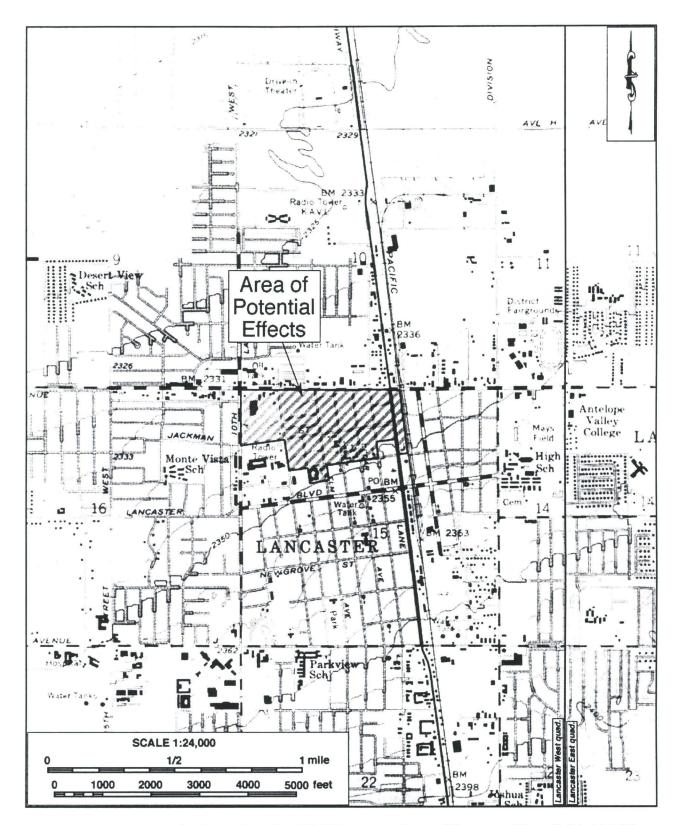


Figure 2. Area of Potential Effects. (Based on USGS Lancaster East and Lancaster West, Calif., 1:24,000 quadrangles [USGS 1974a; 1974b])

#### CULTURAL SETTING

#### ARCHAEOLOGICAL CONTEXT

In order to understand Native American cultures prior to European contact, archaeologists have devised chronological frameworks on the basis of artifacts and site types dating back some 12,000 years. One of the more frequently used time frames for the Mojave Desert divides the region's prehistory into five periods marked by changes in archaeological remains, reflecting different ways in which Native peoples adapted to their surroundings. According to Warren (1984) and Warren and Crabtree (1986), these five periods are the Lake Mojave Period (12,000-7,000 years ago), the Pinto Period (7,000-4,000 years ago), the Gypsum Period (4,000-1,500 years ago), the Saratoga Springs Period (1,500-800 years ago), and the Protohistoric Period (800 years ago to European contact).

This time frame is based on general technological changes that progressed from large stone projectile points, with few milling stones for grinding food products, to smaller projectile points with an increase in milling stones. The scheme also notes increases in population, changes in food procurement and resource exploitation strategies, and more cultural complexity over time. During the Protohistoric Period, there is evidence of contact with the Colorado River tribes and the introduction of pottery across the Mojave Desert.

#### ETHNOHISTORICAL CONTEXT

The City of Lancaster, in the heart of the Antelope Valley, lies on the southern edge of the traditional homeland of the Kitanemuk, a small Native American group located principally on the southern and western flanks of the Tehachapi Mountains (Blackburn and Bean 1978). The general ecological adaptation and subsistence technology of the Kitanemuk differed little from that of their neighbors to the north or west, such as the Southern Valley Yokuts. Linguistic evidence suggests the presence of some form of the patrilineal system found elsewhere in southern California, but the lineages were not totemic, nor was there evidence of moieties. Precise data on the demographic characteristics and political organization of the Kitanemuk can no longer be obtained.

The Kitanemuk may have had contacts with the Spanish colonizers as early as the 1770s, but little historical information is available today on this small group, which had no more than 500-1,000 members at the peak of its population. The Kitanemuk were apparently represented at the San Fernando, San Gabriel, and San Buenaventura Missions. After the American take-over, some were found on the Tejon Reservation in the 1850s, and later on at the Tule River Reservation, where some of their descendants still reside.

## HISTORICAL CONTEXT

In 1772, a small force of Spanish soldiers under the command of Pedro Fages became the first Europeans to set foot in the Antelope Valley. Over the next century, a number of famous explorers, including Francisco Garcés, Jedediah Smith, Kit Carson, and John C. Fremont, traversed the Antelope Valley, but their explorations brought little change to the region. For much of the 19th century, the Antelope Valley continued to receive only the occasional hunters, drawn by its legendary herds of antelopes, and travelers. Don Alexander and Phineas Banning's first stage line between Los Angeles and northern California, for example, ran through the southern edge of the valley.

The history of today's City of Lancaster began in 1876, when the Southern Pacific Railway Company chose the essentially uninhabited Antelope Valley for its line between the San Joaquin Valley and the Los Angeles Basin, and established a string of regularly spaced sidings and water stops across the desert. Around one of these sidings and water stops, Moses Landley Wicks, a real estate developer who was active in many parts of southern California at the time, purchased from the Southern Pacific 640 acres of land and laid out the townsite of Lancaster in 1884. During the land boom of the 1880s and early 1890s, the new town prospered, thanks to the abundance of artesian water in the vicinity. Beginning in 1895, however, several years of continuous drought all but destroyed Lancaster and other settlements in the Antelope Valley, and forced nearly all settlers to abandon their land and leave the region (Hamilton et al. 1913:35-37).

Along with the other settlements, Lancaster recovered slowly after the turn of the century. With the adoption of electric water pumps, irrigated agriculture became the primary means of livelihood in the region. Alfalfa, which was first introduced around 1890 (Hamilton et al. 1913:34), emerged as the principal crop in the early 20th century, so much so that "alfalfa is king" became the slogan for the agricultural interests in the valley. After WWII, however, the aerospace and defense industry overtook agriculture as the most important sector in the Antelope Valley economy. In 1977, Lancaster was incorporated as a city. Since then, the city has experienced rapid growth due to the phenomenal expansion of housing development, and increasingly has taken on the characteristics of a "bedroom community" in support of the Greater Los Angeles area.

## **RESEARCH METHODS**

## **RECORDS SEARCH**

The South Central Coastal Information Center (SCCIC), located at the California State University, Fullerton, provided the records search service for this study. During the records search, Catharine M. Wood, SCCIC staff archaeologist, examined maps and records on file for previously identified cultural resources inside or within a one-mile radius of the Area of Potential Effects, and existing cultural resources reports pertaining to the vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, or Points of Historical Interest, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resource Information System.

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## FIELD SURVEY

Between November 21, 2002, and January 22, 2003, CRM TECH principal investigator Bai "Tom" Tang and historical archaeologist Josh Smallwood (see App. 1 for qualifications) completed the field survey of the APE. The survey was carried out by walking along each of the streets in and around the APE and visually inspecting all buildings and structures, as well as vacant lots, within the APE boundaries. During the survey, Tang and Smallwood made detailed notations and preliminary photo-recordation of the structural and architectural characteristics and current conditions of all buildings that appear to be more than 45 years old and retain at least a recognizable level of historic integrity. Buildings that were constructed in or after 1957 and pre-1957 buildings that have completely lost historic integrity through alterations were excluded from further studies.

Based on Tang and Smallwood's field observations, CRM TECH contract historian/ architectural historian Jennifer Mermilliod (see App. 1 for qualifications) composed brief descriptions of all recorded buildings that were determined to be pre-1957 in age through historical research. The results of these procedures were ultimately compiled into the State of California's standard record forms, popularly known as DPR forms, for submission into the California Historical Resource Information System.

## HISTORICAL BACKGROUND RESEARCH

Historical background research for this study was conducted by Bai "Tom" Tang and Josh Smallwood using historic maps of the Lancaster area and the archival records of the City of Lancaster and the County of Los Angeles, and local historical materials on file at the Lancaster Public Library. The City of Lancaster Museum Art Gallery, another important repository of local historical materials, was closed during the time of the research and was thus unavailable for this study.

Among the primary sources consulted during the research, the City of Lancaster's building safety records and the County of Los Angeles' real property assessment records provided the most pertinent information. Historic maps examined for this study included the U.S. Geological Survey's (USGS) topographic maps dated 1917, 1933, and 1958, and Sanborn insurance map dated 1910, 1918, 1923, 1927, and 1934. The USGS maps are collected at the Science Library of the University of California, Riverside, and the Sanborn maps were provided by Environmental Data Resources, Inc., of Southport, Connecticut.

## CONSULTATION WITH LOCAL COMMUNITY

In order to identify and evaluate potential properties of known local historical interest, Bai "Tom" Tang and Josh Smallwood initiated telephone consultation with four of Lancaster's leading local historians in January, 2003. Among those contacted were Norma Gerba and David Earle of the City of Lancaster Museum Art Gallery, and Walter Primmer and Milton Stark of the West Antelope Valley Historical Society. Information obtained from these well-known local historians is incorporated into the study results presented in the sections below and in Appendix 3.

## NATIVE AMERICAN CONSULTATION

As part of the research procedures, CRM TECH archaeologist Laura Hensley Shaker (see App. 1 for qualifications) contacted the State of California's Native American Heritage Commission in Sacramento to request a records search in the commission's sacred lands file. Following the commission's recommendations, CRM TECH further contacted eight Native American representatives in the region, both by mail and by telephone, to solicit local Native American input regarding any possible cultural resources concerns over the proposed undertaking. The correspondences between CRM TECH and the Native American representatives are attached to this report in Appendix 2.

## **RESULTS AND FINDINGS**

#### PREVIOUS CULTURAL RESOURCES STUDIES

According to records on file at the South Central Coastal Information Center, small portions of the Area of Potential Effects were covered by previously completed cultural resources surveys (Fig. 3), but the APE as a whole had not been surveyed systematically for cultural resources prior to this study. Outside the APE boundaries but within a one-mile radius, SCCIC records show a total of 25 previous cultural resources studies on various tracts of land and linear features (Fig. 3). As a result of these studies, 25 potential cultural resources, including 11 archaeological sites and 14 historic-era features of built environment, were recorded within the scope of the records search.

One of these previously identified cultural resources was recorded within the present APE. Designated Site 19-186683, it represents an adobe home located at 45007 N. Elm Avenue. Built in 1941-1942, the house was the long-time home of the Rowell family, which included one of Lancaster's best-remembered heroes of WWII (Love and Tang 2002:9-12). Because of its association with this locally recognized family and its embodiment of advances in adobe masonry building practices in the 1930s-1940s, the house was determined to be eligible for listing in the California Register of Historical Resources with a local level of significance *(ibid.*:13).

The other 24 previously identified cultural resources were located outside the present APE boundaries. Ten of the archaeological sites dated to the historic period, and included mostly trash deposits and structural remains. The other site was prehistoric—i.e., Native American—in nature, consisting of a scatter of fire-affected rocks. The historic-era features of built environment were predominantly buildings, including nine within the nearby Lancaster Fairgrounds complex. One of these resources, known as the Cedar Avenue Complex, is listed in the National Register of Historic Places, and another, the Western Hotel, has been designated a California Historical Landmark (No. 658).

Of the 25 previously identified cultural resources summarized above, only one, the Rowell adobe, was found within the current APE. However, the presence of these resources suggests a rather high sensitivity of the APE for as-yet unrecorded cultural resources, especially those from the historic period.

## POTENTIAL CULTURAL RESOURCES WITHIN THE APE

Historic maps consulted for this study indicate that, as a part of the original 1884 townsite of Lancaster, the APE showed much evidence of development by the early 20th century (Fig. 4). The development was concentrated in the eastern half of the APE, especially near the southeastern corner, which is the portion of the APE closest to the center of Lancaster's historic downtown core, located at the intersection of present-day Lancaster Boulevard and Sierra Highway.

Throughout the rest of the historic period, the imbalance of growth in the APE persisted, not only between the eastern and the western halves, but also within each city block (Fig. 5; USGS 1958). None of the blocks were built out during any given period in history, as demonstrated by the USGS and Sanborn maps from the pre-1957 period. Rather, the development of each block has evidently been a gradual process that extended over several

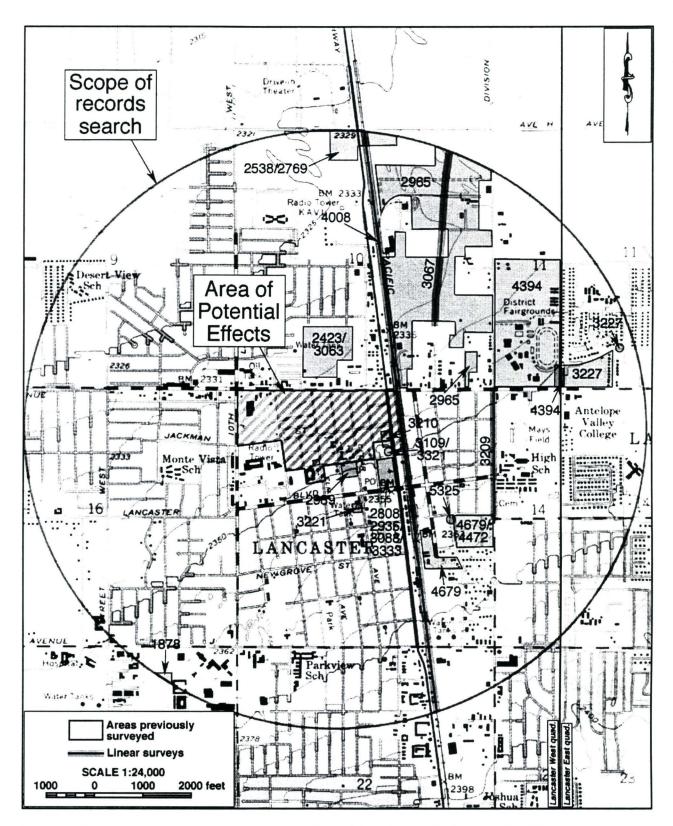


Figure 3. Previous cultural resources surveys in the vicinity of the APE, listed by SCCIC file number. Locations of previously identified cultural resources are not shown as a protective measure.

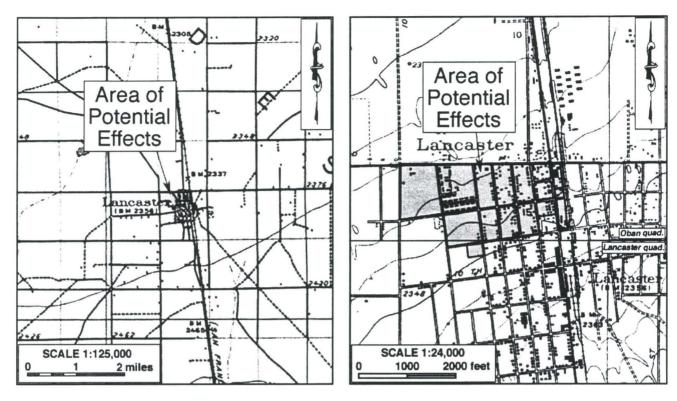


Figure 4. The APE and vicinity in 1915. (Source: USGS 1917)

Figure 5. The APE and vicinity in 1929-1930. (Source: USGS 1933a; 1933b)

decades, with later constructions constantly filling vacant lots left between older buildings. Consequently, none of the streets and neighborhoods within the APE shows a sufficiently distinctive or coherent historical characteristic to be considered a potential historic district, as revealed through field inspections.

As mentioned above, one pre-1957 building, the Rowell adobe at 45007 N. Elm Avenue, was previously recorded within the APE. During the present survey, a total of 80 additional historic-era buildings or groups of buildings were identified and recorded within the APE, representing 53 single-family residences, 11 multiple-family residences, 7 commercial buildings, and 9 religious properties, including 2 churches and 2 church-operated schools. These 81 properties, including the Rowell adobe, are listed below and described in further detail in Appendix 3, and the construction dates of these properties are summarized in Table 1. As the table shows, the majority of the 81 properties recorded within the APE, numbering 47 in total, date to the post-WWII period (1946-1957).

#### List of Historic-Era Buildings within the APE

(See Fig. 6 for location and App. 3 for further detail)

Street No.	Street	ID	<b>Construction Date</b>
45001	N. Beech Avenue	Salvation Army Community Center	1947
45015	N. Beech Avenue	Single-family residence	1929/1934
45027-45029	N. Beech Avenue	Single-family residence	Ca. 1929
45046-45056	N. Beech Avenue	Multiple-family residence	Ca. 1950
45051-45053	N. Beech Avenue	Multiple-family residence	1948-1951
45103	N. Beech Avenue	Our Lady of Charity	Ca. 1928

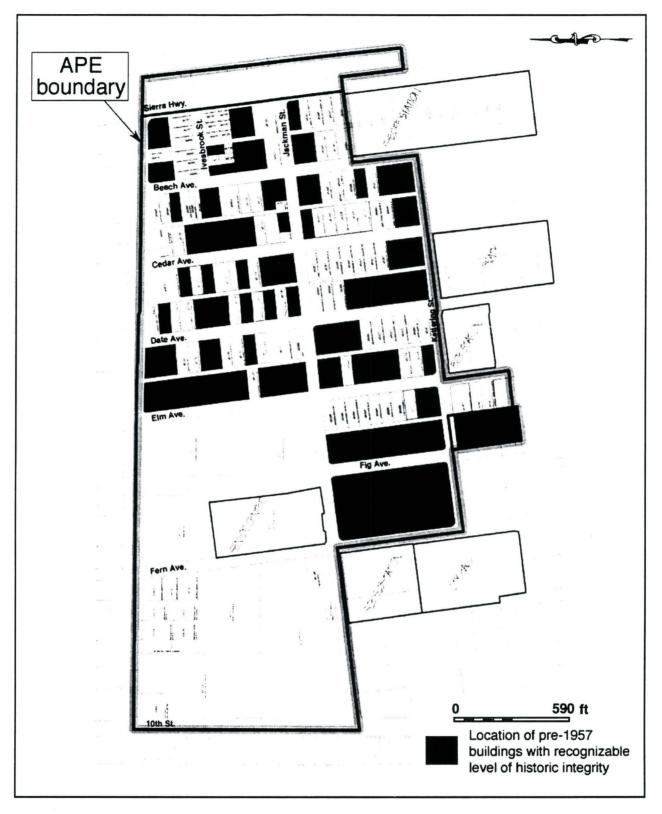




Table 1. Construction Dates of Historic-Era Buildings in the APE		
Period	Count	
1910-1925	10	
1926-1945	24	
1946-1950	30	
1951-1957	17	
Total	81	

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## List of Historic-Era Buildings within the APE (Continued)

15105			1051
45107	N. Beech Avenue	Our Lady of Charity	1954
45108	N. Beech Avenue	Single-family residence	1938
45114	N. Beech Avenue	Single-family residence	1942
45120-45124		Single-family residence	1926 (altered)
45128	N. Beech Avenue	Single-family residence	Ca. 1929 (altered)
45135	N. Beech Avenue	Single-family residence	Ca. 1923 (altered)
45141	N. Beech Avenue	Single-family residence	Ca. 1919-1930
45157	N. Beech Avenue	Single-family residence	Ca. 1914?, rear portion 1923-1927
45002	N. Cedar Avenue	Single-family residence	1946-1947
45006-45008	N. Cedar Avenue	Multiple-family residence	1956
45007	N. Cedar Avenue	Sacred Heart Catholic Church	1955
45101	N. Cedar Avenue	Single-family residence	Ca. 1948 (altered)
45109	N. Cedar Avenue	Single-family residence	Ca. 1916, rear portion 1923-1927
45115	N. Cedar Avenue	Single-family residence	Ca. 1930
45118	N. Cedar Avenue	Single-family residence	1939
45124	N. Cedar Avenue	Single-family residence	Ca. 1929
45127	N. Cedar Avenue	Single-family residence	Ca. 1929
45128	N. Cedar Avenue	Single-family residence	Ca. 1916?, rear portion 1923-1927
45134	N. Cedar Avenue	Single-family residence	Ca. 1931
45138	N. Cedar Avenue	Single-family residence	Ca. 1938
45142-45144	N. Cedar Avenue	Single-family residence	1937
45145	N. Cedar Avenue	Single-family residence	Ca. 1918
45148	N. Cedar Avenue	Single-family residence	Ca. 1931
45157	N. Cedar Avenue	Single-family residence	Ca. 1950
45002	N. Date Avenue	Sacred Heart School	1945-1956
45032	N. Date Avenue	Sacred Heart Church/School Facility	1949
45038	N. Date Avenue	Sacred Heart Youth Center	Ca. 1929
45045	N. Date Avenue	Antelope Valley Adventist School	1949
45047	N. Date Avenue	Antelope Valley Adventist Church	1951
45104	N. Date Avenue	Single-family residence	1952
45110-45114	N. Date Avenue	Single-family residence	Ca. 1922
45126	N. Date Avenue	Single-family residence	Ca. 1949
45127-45129	N. Date Avenue	Single-family residence	Ca. 1917 (altered)
45138	N. Date Avenue	Multiple-family residence	Ca. 1948 (altered)
45142	N. Date Avenue	Multiple-family residence	Relocated in 1953
45145	N. Date Avenue	Single-family residence	Relocated(?) ca. 1948
45148-45150	N. Date Avenue	Multiple-family residence	1951
45149	N. Date Avenue	Single-family residence	Ca. 1948
45166	N. Date Avenue	Single-family residence	Ca. 1940
45002	N. Elm Avenue	Single-family residence	1946
45002 45007	N. Elm Avenue	Single-family residence	1940 1941-1942
40007	IN. EIIII AVEIlue	Single-failing residence	1741-1742

#### List of Historic-Era Buildings within the APE (Continued)

45020	N. Elm Avenue	Single-family residence	1947	
45026	N. Elm Avenue	Single-family residence	1947	
45032	N. Elm Avenue	Single-family residence	Ca. 1950	
45038	N. Elm Avenue	Single-family residence	Relocated in 1948	
45050	N. Elm Avenue	Single-family residence	1950-1952	
45056	N. Elm Avenue	Single-family residence	Ca. 1952	
45108	N. Elm Avenue	Single-family residence	Ca. 1950	
45110-45114	N. Elm Avenue	Single-family residence	Ca. 1950 (altered)	
45120	N. Elm Avenue	Single-family residence	Ca. 1951	
45132	N. Elm Avenue	Single-family residence	Ca. 1950 (altered)	
45138	N. Elm Avenue	Single-family residence	1949 (altered)	
45144	N. Elm Avenue	Single-family residence	Ca. 1950	
45150	N. Elm Avenue	Single-family residence	Ca. 1950	
45158	N. Elm Avenue	Single-family residence	Ca. 1945	
45162	N. Elm Avenue	Single-family residence	1955	
45168	N. Elm Avenue	Sharon's Canine Coiffures	1937-1939 (altered)	
45002-45056	N. Fig Avenue	Multiple-family residence	1953	
45017-45037	N. Fig Avenue	Rowell Terrace Apartments	1954	
528	W. Avenue I	L&S Automotive Repair	Ca. 1938 (altered in 1958)	
650	W. Avenue I	AC Auto Electric	1947	
666	W. Avenue I	Cameo Ranch Company	1936 (altered in 1961)	
520	W. Ivesbrook Street	Single-family residence	Relocated in 1953	
530	W. Ivesbrook Street	Single-family residence	Ca. 1929	
544	W. Jackman Street	Single-family residence	Ca. 1947	
556	W. Jackman Street	Multiple-family residence	Ca. 1937	
557	W. Jackman Street	Single-family residence	Ca. 1916	
561	W. Jackman Street	Single-family residence	1934-1945?	
613	W. Jackman Street	Single-family residence	Ca. 1948	
665	W. Jackman Street	Single-family residence	Ca. 1950	
657-659	W. Kettering Street	Multiple-family residence	1956 (altered in 1994)	
716-726	W. Kettering Street	Multiple-family residence	1955	
45057	N. Sierra Highway	Commercial building	Ca. 1947-1949	
45117	N. Sierra Highway	Desert Detail & Auto Glass	1952	
45159	N. Sierra Highway	David's Auto Center	1955	

#### LOCAL HISTORIAN INPUT

Three of the four local historians contacted by CRM TECH during this study, Walter Primmer, Norma Gerba, and David Earle, raised the possibility that an adobe house located at 557 W. Jackman Street may be the oldest residence in this part of Lancaster. Although few facts were known definitively about its construction history, the adobe house's alignment with the cardinal directions instead of the nearby streets has generated much speculation among local residents that its presence may have predated the development of this portion of the townsite, or even the creation of the townsite in 1884. The results of this study, however, suggest that the adobe house was most likely constructed in the 1910s (County Assessor 1908-1920). At the present time, there is no evidence that this house, or any other buildings within the APE, date to the pre-1900 period.

#### NATIVE AMERICAN INPUT

In response to CRM TECH's inquiry, the Native American Heritage Commission reported that the sacred lands record search identified no Native American cultural resources in the immediate vicinity of the APE (App. 2). However, noting that "the absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area," the commission suggested that other Native American representatives be contacted, and provided a list of potential contacts in the region (App. 2).

Upon receiving the Native American Heritage Commission's reply, CRM TECH contacted all but one of the individuals on the referral list and the organizations they represent by mail on October 31, 2002 (App. 2). The sole exception was John Valenzuela, who previously requested not to be notified of projects in this area. In addition, CRM TECH also contacted Eddie Phillips, Environmental Protection Coordinator for the San Manuel Band of Mission Indians. Several attempts were made to contact these Native American Representatives by telephone and fax from November 15 to December 13, 2002. As of this time, the only response received was from Randy Guzman-Folkes, who recommended archaeological and Native American monitoring for possible prehistoric archaeological remains. No specific properties of Native American traditional cultural value have been identified by any of the sources consulted.

At this time, CRM TECH continues to seek telephone or written responses from the Native American representatives who have not yet responded. If any Native American concerns arise in the future regarding potential properties of traditional cultural value in the vicinity of the APE, they will be reported immediately to the City of Lancaster.

#### MANAGEMENT CONSIDERATIONS

#### "HISTORIC PROPERTIES" AND "HISTORICAL RESOURCES"

#### Definition

The objective of this survey, as outlined by the City of Lancaster, is to identify and evaluate any "historic properties" or "historical resources" that may exist within or adjacent to the Area of Potential Effects of the proposed undertaking. "Historic properties," as defined by the Advisory Council on Historic Preservation, include "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior" (36 CFR 800.16(l)). The eligibility for inclusion in the National Register is determined by applying the following criteria, developed by the National Park Service as per provision of the National Historic Preservation Act:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or

- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history. (36 CFR 60.4)

For CEQA-compliance considerations, the State of California's Public Resources Code (PRC) establishes the definitions and criteria for "historical resources," which require similar protection to what NHPA Section 106 mandates for historic properties. "Historical resources," according to PRC §5020.1(j), "includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." More specifically, CEQA guidelines state that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR §15064.5(a)(1)-(3)).

Regarding the proper criteria of historical significance, CEQA guidelines mandate that "a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

## Significance Evaluation

Among the 81 historic-era buildings or groups of buildings identified within the APE, the former Rowell family residence at 45007 N. Elm Avenue was previously determined to meet CEQA's definition of a "historical resource," with a local level of significance. The previous study on that building states:

[T]he adobe house and its garage were constructed in 1939-1942 for—and to a certain degree by—the Rowell family, a well-respected family of educators and other professionals in the community, and served as home to various members of the family during most of the ensuing period. The two most prominent members of the family were probably Maurice Holmes Rowell, one-time principal of the Antelope Valley Union High School, and Richard Merrill Rowell, one of Lancaster's best remembered war heroes. Since Maurice Rowell passed away in 1928 and Richard Rowell enlisted in the navy in 1939 and was lost in action in 1942, neither of them is considered to be particularly associated with the adobe house, although Richard Rowell is known to have participated in the construction of the garage. However, in view of the fact that both the house and its site, on which the family lived since 1924, are closely identified with the Rowell family, this location is apparently of at least some symbolic historic interest to the local community.

In terms of its architectural merits, the adobe house is an early example of the California Ranch style, but falls short of constituting an important specimen of that style. However, it stands today as one of the few remaining representatives in Lancaster of the 1930s adobe revival movement in the Antelope Valley, when the economic and environmental benefits of adobe construction was rediscovered in the aftermath of the Great Depression. Furthermore, the construction methods and techniques embodied in this adobe house are not simply the resurrection of building practices employed in the early historic period, but rather represent modern adaptation and enhancement of those practices. Most notably, they exemplify 1930s-1940s homebuilders' responses to the devastation that the 1933 Long Beach Earthquake brought onto unreinforced masonry buildings and the subsequent changes in local building regulations. The differences in the construction of the house and the garage, it can be argued, demonstrate in microcosm the evolution of adobe building technology from the traditional to the modern during that revival.

Based on these considerations, this study concludes that the adobe house on the subject property meets Criteria 2 and 3 for listing in the California Register, with a local level of significance, and thus qualifies as a "historical resource," and that the garage associated with the house comprises a contributing element to the resource. (Love and Tang 2002:12-13)

For the same reasons, the former Rowell residence also appears eligible for listing in the National Register under Criteria B and C, which are essentially identical to Criteria 2 and 3 for the California Register. It therefore meets Section 106's definition of a "historic property," again with a local level of significance.

None of the other 80 properties identified within the APE proves to be closely associated with any historic figures or events of recognized significance in national, state, and local history, nor does any of them represent an important example or specimen of a particular style, type, period, region, or method of construction, or demonstrate any of the other architectural or aesthetic merits required by the National Register and California Register criteria. Furthermore, many of these buildings have, to various degrees, lost part of their historic integrity to relate to their period of construction. The majority of them, in fact, date only to 1946-1957, when the United States embarked upon a period of rapid urban expansion amid the post-WWII boom, leaving large numbers of residential and commercial developments surviving to the present time throughout southern California.

Due to the lack of any distinctive qualities that would render them eligible for listing in the National Register or the California Register, none of these 80 properties qualifies as a "historic property" or a "historical resource," as defined above. The former Rowell residence, therefore, appears to be the only a "historic property"/"historical resource" present within the APE.

#### **PROJECT EFFECTS ASSESSMENT**

Under Section 106 provisions, federal agencies, as well as state or local agencies receiving federal funding, are required to take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1(a)). Similarly, CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project

that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired."

According to 36 CFR 800.16(i), "*Effect* means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register." In 36 CFR 800.5(a)(1), the criteria of "adverse effect" are set forth as follows:

An adverse effect is found when an undertaking may alter, directly or indirectly, and of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Under currently plans, the proposed undertaking calls for the demolition of the former Rowell residence, as its current site will be occupied by a future neighborhood park. Under the statutory and regulatory guidelines cited above, the demolition of this building clearly constitute an adverse effect on this "historic property"/"historical resource."

## RECOMMENDATIONS

In order to prevent, reduce, or mitigate the anticipated adverse effect on the former Rowell residence by the proposed undertaking, CRM TECH recommends the following options to the City of Lancaster:

- That the former Rowell residence be rehabilitated for adaptive use, if feasible; or
- If physical impact is unavoidable, that the historical and architectural data about the former Rowell residence be preserved through comprehensive documentation, and that the demolition and other ground-disturbing activities be monitored by a qualified archaeologist.

If either of these alternatives is adopted and carried out, the City of Lancaster may then reach a finding that the proposed undertaking will have no effect on this "historic property"/"historical resource," or that such effect will have been reduced to a level less than significant. No other historical/archaeological investigations are recommended for the proposed undertaking. However, if buried archaeological remains are discovered during any earth-moving operations, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

#### REFERENCES

Blackburn, Thomas C., and Lowell John Bean

1978 Kitanemuk. In Robert F. Heizer (ed.): *Handbook of North American Indians*, Vol. 8: *California*; pp. 564-569. Smithsonian Institution, Washington, D.C.

County Assessor, Los Angeles

1908-1920 Los Angeles County real property tax assessment records; Book 73, Map 2. On file, Los Angeles County Archives, Los Angeles.

Hamilton, Eva, Ellen Beery, Olcott Bulkley, Clara McDougal, Florence Rector, Minta Thomason, Rutha Williams, and Blanche Wright

1913 The Hart of Antelope Valley. Antelope Valley Union High School student project, Lancaster. Reprinted in Glen A. Settle (ed.): *Here Roamed the Antelope*; pp. 19-41. The Kern-Antelope Historical Society, Rosamond, 1963.

Love, Bruce, and Bai "Tom" Tang

2002 Historical/Archaeological Resources Survey Report: APNs 3133-280-22 and 3133-280-23, 45007 North Elm Street, City of Lancaster, Los Angeles County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

USGS (United States Geological Survey, U.S. Department of the Interior)

- 1917 Map: Elizabeth Lake, Calif. (30', 1:125,000); surveyed in 1915.
- 1933a Map: Lancaster, Calif. (6', 1:24,000); surveyed in 1929-1930.
- 1933b Map: Oban, Calif. (6', 1:24,000); surveyed in 1930.
- 1958 Map: Lancaster West, Calif. (7.5', 1:240,000); aerial photos taken in 1956, fieldchecked in 1958.
- 1969 Map: San Bernardino, Calif. (1:250,000); 1958 edition revised.
- 1974a Map: Lancaster East, Calif. (7.5', 1:24,000); 1958 edition photorevised in 1974.
- 1974b Map: Lancaster West, Calif. (7.5', 1:24,000); 1958 edition photorevised in 1974.
- 1975 Map: Los Angeles, Calif. (1:250,000); aerial photos taken in 1972.

Warren, Claude N.

1984 The Desert Region. In Michael J. Moratto (ed.): *California Archaeology*; pp. 339-430. Academic Press, Orlando, Florida.

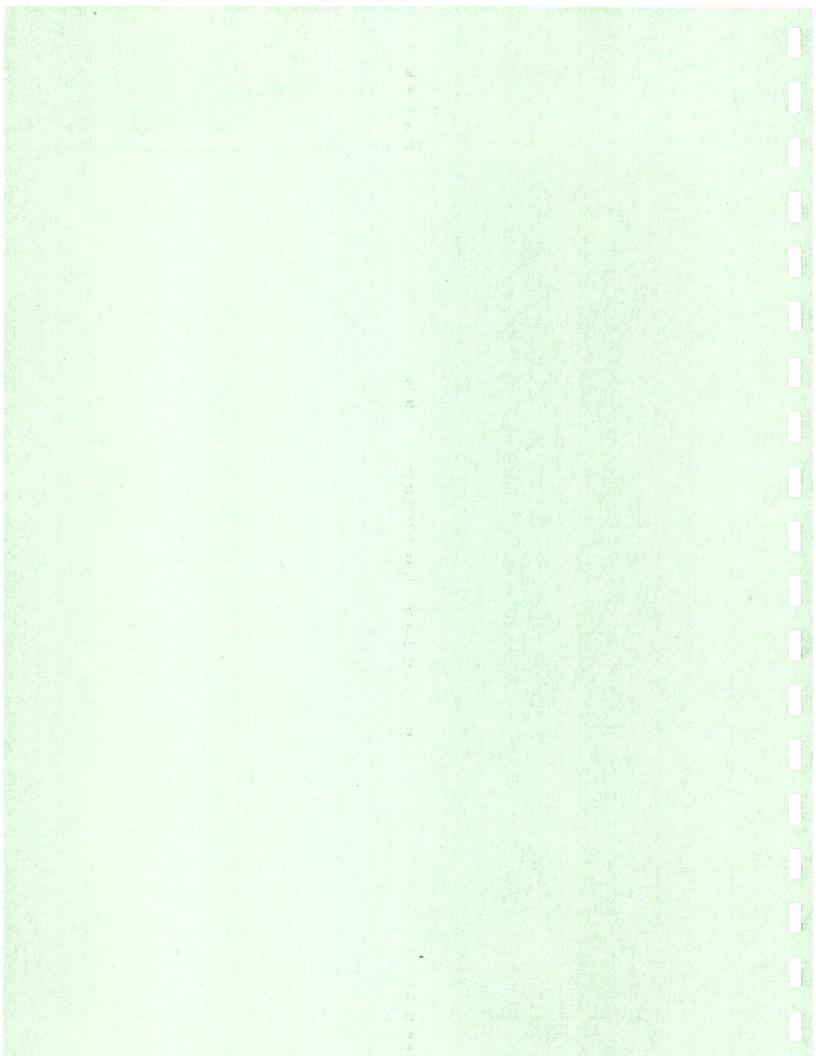
Warren, Claude N., and Robert H. Crabtree

1986 Prehistory of the Southwestern Area. In Warren L. d'Azevedo (ed.): *Handbook of North American Indians*, Vol. 11: *Great Basin*; pp. 183-193. Smithsonian Institution, Washington, D.C. NOTE TO REVIEWERS:

THE HISTORICAL RESOURCES SURVEY REPORT TECHNICAL APPENDICES ARE AVAILABLE FROM THE CITY UPON REQUEST. PLEASE CONTACT GLENN LAJOIE AT RBF CONSULTING (949.855.3663).



# **15.7 Hazardous Materials Study**





January 17, 2002

JN 10-102041

Mr. Brian Ludicke City of Lancaster 44933 North Fern Avenue Lancaster, CA 93534-2461

### SUBJECT: ENVIRONMENTAL SITE ASSESSMENT North Downtown Neighborhood Revitalization/Transit Village Plan

Dear Mr. Ludicke:

RBF Consulting (RBF) is pleased to submit this Environmental Site Assessment for the above referenced project, herein referenced as the "subject site." This Assessment has been prepared to evaluate the potential presence of hazardous materials and the expected nature of the materials that may be on the subject site addressed within this Assessment. This Assessment has been prepared for the sole use of the **City of Lancaster**, for the above referenced subject site. Neither this Assessment, nor any of the information contained herein shall be used or relied upon for any purpose by any person or entity other than the **City of Lancaster**.

The Environmental Site Assessment was performed in general accordance with ASTM Standard Practice E 1527-00, the scope-of-services and inherent limitations presented in our proposal. The Assessment is not intended to present specific quantitative information as to the actual presence of hazardous materials on or adjacent to the subject site, but is to identify the potential presence based on available information.

Should you or your staff have any questions after reviewing the attached report, please do not hesitate to contact me at 949/855-3686 or via e-mail at bgrove@rbf.com.

Sincerely,

Bruce R. Grove Jr., REA Project Manager/Environmental Assessor Environmental Services-Special Projects



PLANNING E DESIGN E CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 E P.O. Box 57057, Irvine, CA 92619-7057 E 949.472.3505 E Fax 949.472.8373

### STATEMENT OF ENVIRONMENTAL PROFESSIONALS

### **Statement of Quality Assurance**

I have performed this Assessment in accordance with generally accepted environmental practices and procedures, as of the date of this report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained with this Assessment are based upon site conditions I readily observed or were reasonably ascertainable and present at the time of the site inspection.

The conclusions and recommendations stated in this report are based upon personal observations made by employees of RBF and upon information provided by others. I have no reason to suspect or believe that the information provided is inaccurate.

Signature of RBF Environmental Assessor-Richard Beck

whon

Signature/Environmental Assessor

### **Statement of Quality Control**

The objective of this Environmental Site Assessment was to ascertain the potential presence or absence of environmental releases or threatened releases that could impact the subject site, as delineated by the Scope-of-Work. The procedure was to perform reasonable steps in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.

The Scope of this Assessment does not purport to encompass every report, record, or other form of documentation relevant to the subject site being evaluated. Additionally, this Assessment does not include or address reasonable ascertainable Environmental Liens currently recorded against the subject site. To the best of my knowledge, this Environmental Site Assessment has been performed in compliance with RBF Standard Operating procedures protocol for Phase I Environmental Site Assessments.

Signature of RBF Environmental Project Manager-Bruce R. Grove Jr., REA #06865, CEI #14551

Signature/Environmental Project Manage

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# SECTION 1

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# 1.0

# INTRODUCTION

The purpose of conducting this Phase I Environmental Site Assessment is to permit the use of this report to satisfy one of the requirements to gualify for the Innocent Landowner Defense to CERCLA (Superfund Law) liability, by providing an appropriate inquiry into the previous uses of the property in order to identify **Recognized Environmental Conditions.** As defined in ASTM Standard Practice E 1527-00, a Recognized Environmental Condition (REC) is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum produces even under conditions in compliance with laws. The term is not intended to include "de minimis" conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be "de minimis" are not Recognized Environmental Conditions.

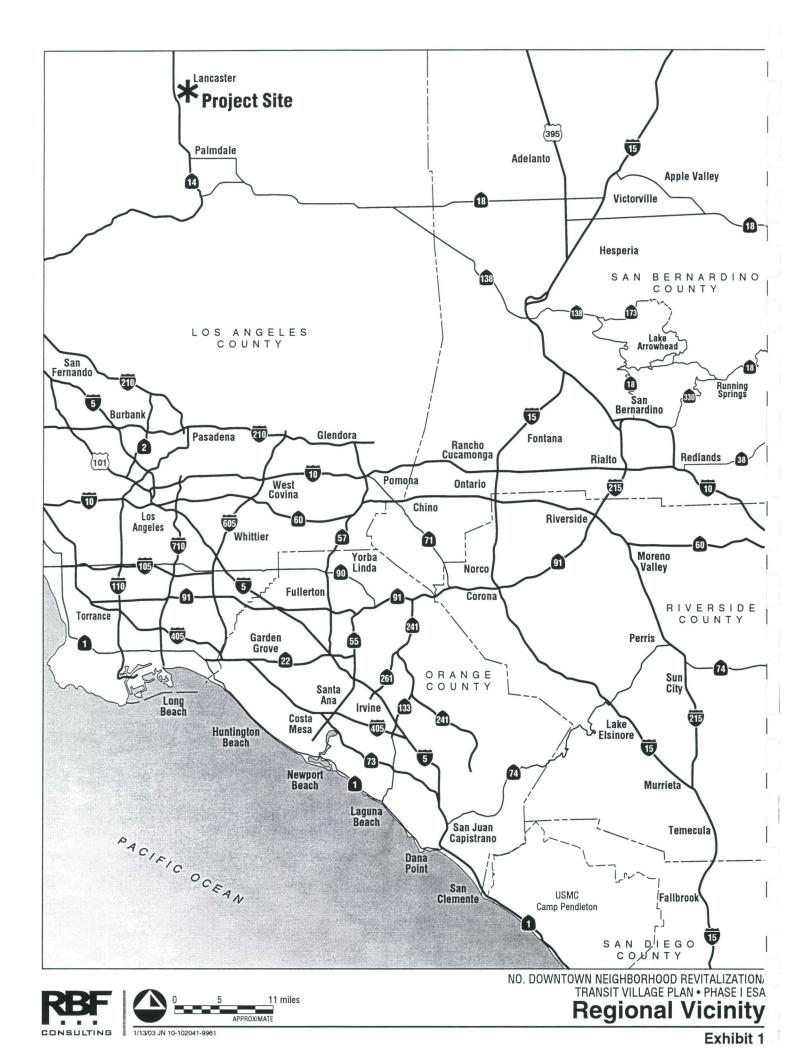
### **1.1 SUBJECT SITE**

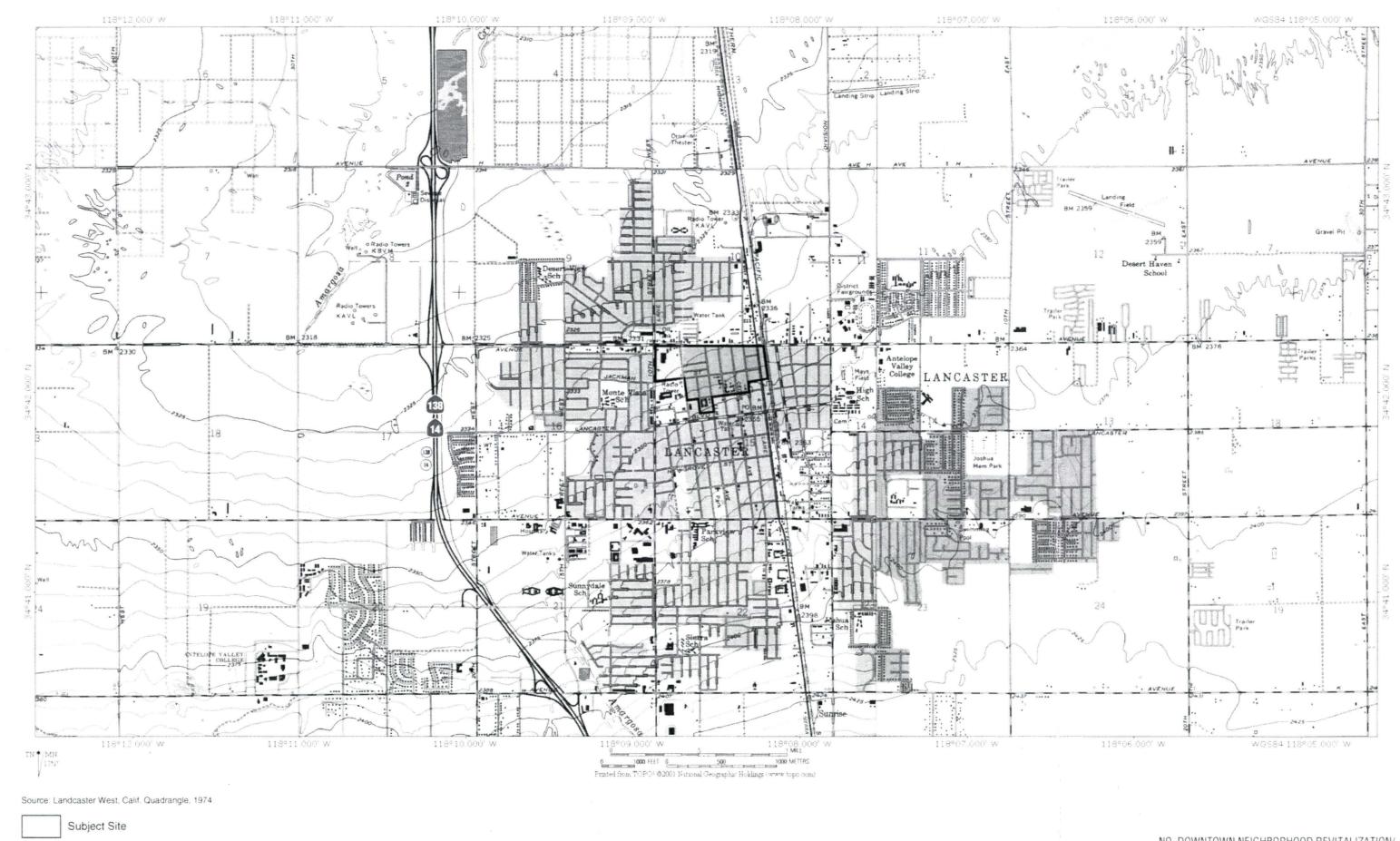
The subject site is located within the City of Lancaster, County of Los Angeles, State of California (T. 6S., R. 9W., Sec. 16 and 21, SBBM) (refer to Exhibit 1, *Regional Vicinity*). More specifically, the subject site comprises approximately 103 acres and is generally located south of Avenue I, east of 10<sup>th</sup> Street West between Avenue I and Jackman Street, east of Fern Avenue between Jackman and Kettering Streets, and north of Jackman Street between 10<sup>th</sup> Street West and west North Sierra Highway (refer to Exhibit 2, *Site Vicinity* and Exhibit 3, *Existing Land Uses*).

The subject site currently contains mixed residential, commercial, institutional, and public land uses (local government), which is served by a grid system of local paved roadways. The subject site contains several prominent uses including Sacred Heart Catholic Church and School, the Antelope Valley Senior Center, the Salvation Army, Homeless Solutions Assessment Center and the Grace Resources Center. Additional educational facilities include the Adventist School and childcare facilities.

Residential uses within the project area consist of a mix of single-family residences, duplexes, triplexes, small apartments and several large-scale apartment complexes. Three (3) of the large-scale complexes are for senior housing. Age and condition of the housing varies greatly; newer apartment complexes are generally in good condition, while older residential structures show signs of age. Many of the single-family residences and smaller-scale multiple-family housing units are in need of minor (cosmetic) to major rehabilitation.







CONSULTING 0\_\_\_\_\_.5 mile

Exhibit 2

Bite Vicinity

NO. DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN • PHASE I ESA



### CITY OF LANCASTER

North Downtown Neighborhood Revitalization/ Transit Village Plan

### LEGEND



Residential

Commercial

Institutional

Vacant

Planning Area

---- Project Boundary



1 INCH = 300 FEET

Source: GIS Data, City of Lancaster

## EXISTING LAND USES

Exhibit 3

Commercial uses are prominent along Avenue I and along the western side of Sierra Highway. West of Fern Avenue, uses are generally retail in character, including fast-food restaurants and a discount grocery store. East of Elm Avenue and along Sierra Highway the commercial uses consist primarily of vehicle-related businesses including auto parts stores, tire stores and automobile sales and repair. The condition of this commercial area declines from west to east.

It should be noted that the only significant area of undeveloped land (vacant lot) is located at the northeast corner of 10<sup>th</sup> Street West and Jackman Street.

Surrounding off-site land uses consist of mixed land uses similar to those noted within the subject site. The Lancaster City Hall, Lancaster Los Angeles County Library and the Los Angeles County Sheriff's Department adjoin the subject site's southern boundary.

Refer to Section 2.0, *Physical Setting*, for a complete description of on-site and offsite conditions.

#### **1.1.1 Proposed Improvements**

The North Downtown Revitalization/Transit Village Plan (NRTVP) proposes a combination of new land uses, expansion of certain existing uses, and rehabilitation of some existing residential blocks. The core focus of the plan is a five-block area bounded by Jackman Street, Beech Avenue, Kettering Street and Fern Avenue. The primary feature of the neighborhood is a new 10 to 12-acre park proposed for the area generally bounded by Jackman Street, Date Avenue, Kettering Street and Fig Avenue.

The proposed park is intended as a joint use facility during school hours for two (2) primary uses within the boundaries of the subject site. The Sacred Heart Catholic Church operates a parish consisting of 4,100 families at the northwest corner of North Cedar Avenue and West Kettering. The facility would expand from the current 5-acre area to 15 acres in order to respond to future needs. The expansion would include a new 1,500-2,000 seat sanctuary supported by 300 spaces of parking. Other expansion needs include doubling the amount of classrooms to support over 700 students and other activity center uses. The existing Church Sanctuary would be retained as a Church Community Center. In order to accommodate the expansion, land area would be utilized west of Beech Avenue to the proposed park facility. This would also result in the closure of North Cedar Avenue and North Date Avenue between West Jackman and West Kettering.

The second entity planned for joint usage of the park is the Desert Christian School, which is proposed to the west of the park and extending to Fern Avenue. Desert Christian School is seeking a Junior/Senior High School on 12 to 15 acres of land. Proposed educational facilities would accommodate 1,500 students. The facility would include classrooms, a gymnasium, library and cafeteria; two story structures are also proposed.

An additional focus of the NRTVP is the revitalization of the four block residential and commercial area bounded by Avenue I, Sierra Highway, Jackman Street and Elm Avenue. The eastern-most block, adjacent to Sierra Highway, is proposed for a combination of retail and service commercial uses. Mixed residential and commercial uses are also a possibility. The retention and rehabilitation of the



existing housing stock is the plan's emphasis for units located approximately three (3) blocks west of Beech Avenue. This effort would include the installation of under ground utilities, decorative lighting fixtures, new landscaping, and improvement of the visual quality of on-site alleyways.

The street pattern would be modified by constructing a new street between Beech Avenue and Elm Avenue approximately 175 feet south of and parallel to Avenue I. Beech, Cedar, and Date Avenues would be closed north of this street. The existing commercial strip along Avenue I is proposed to be redeveloped with residential units to improve the aesthetic appearance of the area and create a land use pattern compatible with the revitalized housing area to the south.

Sites for several social service organizations are also proposed in the NRTVP. The existing Grace Resources Center, located on the east side of Sierra Highway at Jackman Street, would be one of a group of related organizations including the Mental Health Association, St. Vincent de Paul, and the Salvation Army.

The Children's Center of the Antelope Valley is a non-profit organization founded in 1990 to help child abuse victims, prevent child abuse and provide related educational services. The Center's current facility is inadequate in size and design. The Center would develop a 15,445 square foot facility at the northwest corner of Jackman Street and Kern Avenue. The facility would accommodate current needs and offers expansion opportunities for growth.

The Mental Health Association would develop a 20,000 square foot facility on approximately 2.5 acres at the southwest corner of Sierra Highway and Jackman Street. This location, across from Grace Resource Center, would benefit both organizations and their clients. The plan envisions the relocation of the Salvation Army from its current site at Beech Avenue and Kettering Street to the vicinity of Beech Avenue and Jackman Street. St. Vincent de Paul, currently located at the northwest corner of Beech Avenue and Kettering Street, does not require relocation in order to operate as part of this social services group.

#### **1.1.2 Anticipated Future Uses**

The subject site is anticipated to be improved consistent with the proposed design elements noted in Section 1.1.1.

### **1.2 EXECUTIVE SUMMARY**

A partial summary of results of the Phase I Environmental Site Assessment is as follows (refer to Section 2.0 through 5.0 of this Assessment for a complete discussion of our investigation and conclusions):

#### 1.2.1 Site Inspection

The subject site is comprised of several mixed uses. The December 19, 2002 inspection primarily focused on the northern and eastern portion of the subject site, which consists of light-industrial uses (auto-related). Recognized Environmental Conditions (RECs) were noted on-site and are discussed in further below. Refer to Section 4.0, for a detailed description of the site reconnaissance.



Visible evidence to support the presence of underground storage tanks (USTs) was noted for several properties situated along the northern boundary of the subject site (along Avenue I). The USTs were primarily indicated by former fuel islands. More specifically, existing fuel islands were noted within the two north-western/eastern corners of the subject site at 866 Avenue I and 45159 Sierra Highway. In addition to visual inspection, USTs have been identified via Building Department Records, as noted in *Section 3.0*, for the following properties: 528 Avenue I, 802 Avenue I, 866 Avenue I, 610 Avenue I, 45159 Sierra Highway, and 45117 Sierra Highway. The aforementioned properties have historically contained USTs and may currently have USTs on-site.

Mixed light industrial uses are located within the northern/north-western portion of the subject site. The majority of the industrial properties were on concrete foundations, as services were conducted within the interior of auto shops. Typically, common chemical wastes from on-site maintenance operations include oil and grease, solvents from parts cleaning and repair work, and gasoline. The historical and present maintenance uses/materials within the northern industrial uses are considered to create a potential recognized environmental condition.

In addition, it was found that properties associated with auto service/sales may have hydraulic lifts on-site. Due to health impacts, the Environmental Protection Agency (EPA) banned some uses of PCBs in 1977 and most production/use in 1979. However, many transformer's and other materials (such as hydraulic lifts and associated fluids) still contain PCBs. The primary concern with hydraulic lifts is the potential for subsurface leakages of hydraulic fluids from the lift's piston. RBF could not confirm the actual presence of PCBs associated with on-site lifts during the course of this Assessment. No visible signs of staining or leakage was observed with respect to transformers located on-site.

#### 1.2.2 Asbestos Containing Materials

Based upon the year the majority of the existing structures present on the subject site were built (prior to 1978), the potential for asbestos containing materials (ACMs) to be found on-site is considered likely.

- **1.2.3 Lead-Based Paints** Based upon the year the majority of the existing structures present on the subject site were built (prior to 1978), the potential for lead-based paints (LBPs) to be found on-site is considered likely.
- **1.2.4 Adjacent Properties** The physical presence of hazardous materials on the subject site that may have been generated from adjacent properties were not visibly evident during the December 19, 2002 site inspection. However, one (1) adjacent property has reported subsurface releases of petroleum products and toxic chemicals which have impacted groundwater which underlies the southwestern boundary of the subject site. A closure status has not been granted by the appropriate regulatory agency for the following property:
  - ◆ 44949 10<sup>th</sup> Street West (Monte Vista Alta-Dena Dairy): 44949 10<sup>th</sup> Street West is located approximately ¼-mile southwest of the subject site. The site is reported to be occupied by Monte Vista Alta-Dena Dairy and is utilized as a drive through convenience store. The site was originally developed in 1967 and has been previously used as a gas station and drive through store from approximately 30 years. Two (2) 12,000-gallon gasoline USTs were removed



from the property in 1997. Due to reported subsurface releases, soil samples were taken from the property from approximately 20 to 50 feet below ground surface (bgs). Findings from the soil samples indicate that contamination is concentrated around the immediate vicinity of the former tanks. However, the lateral distribution of detectable concentrations of contaminants extends west to 11<sup>th</sup> Street, north to Jackman Street, east to 10<sup>th</sup> Street West and south to surrounding adjacent properties.

Monitoring wells along 10<sup>th</sup> Street had reported concentrations slightly above the Regional Water Quality Control Board's (RWQCB) Maximum Contaminant Levels for drinking water (MCLs). Proposed impacts and improvements to 10<sup>th</sup> Street (within the vicinity of the subject site) are anticipated to be a component of the proposed revitalization project. Due to positive findings, the potential exists for contamination to be present within the subject site's southwestern border and 10<sup>th</sup> Street.

**1.2.5 Public Records** Available public records (provided by EDR) were reviewed. The lists which were reviewed identified thirty-four (34) listed regulatory sites within the boundaries of the subject site. The lists identified sixty-one (61) listed regulatory sites located within a one-mile radius of the subject site (refer to Exhibit 4, *Area Study Map*). A potential "*recognized environmental condition*" on the subject site appears to be present as a result of reported subsurface petroleum discharges at 610/630 West Avenue I and 44949 10<sup>th</sup> Street West. Refer to Section 3.0, *Historical and Regulatory Information Searches*, for a detailed discussion of on-and off-site listed properties.

#### 1.2.6 Historic Recognized Environmental Condition

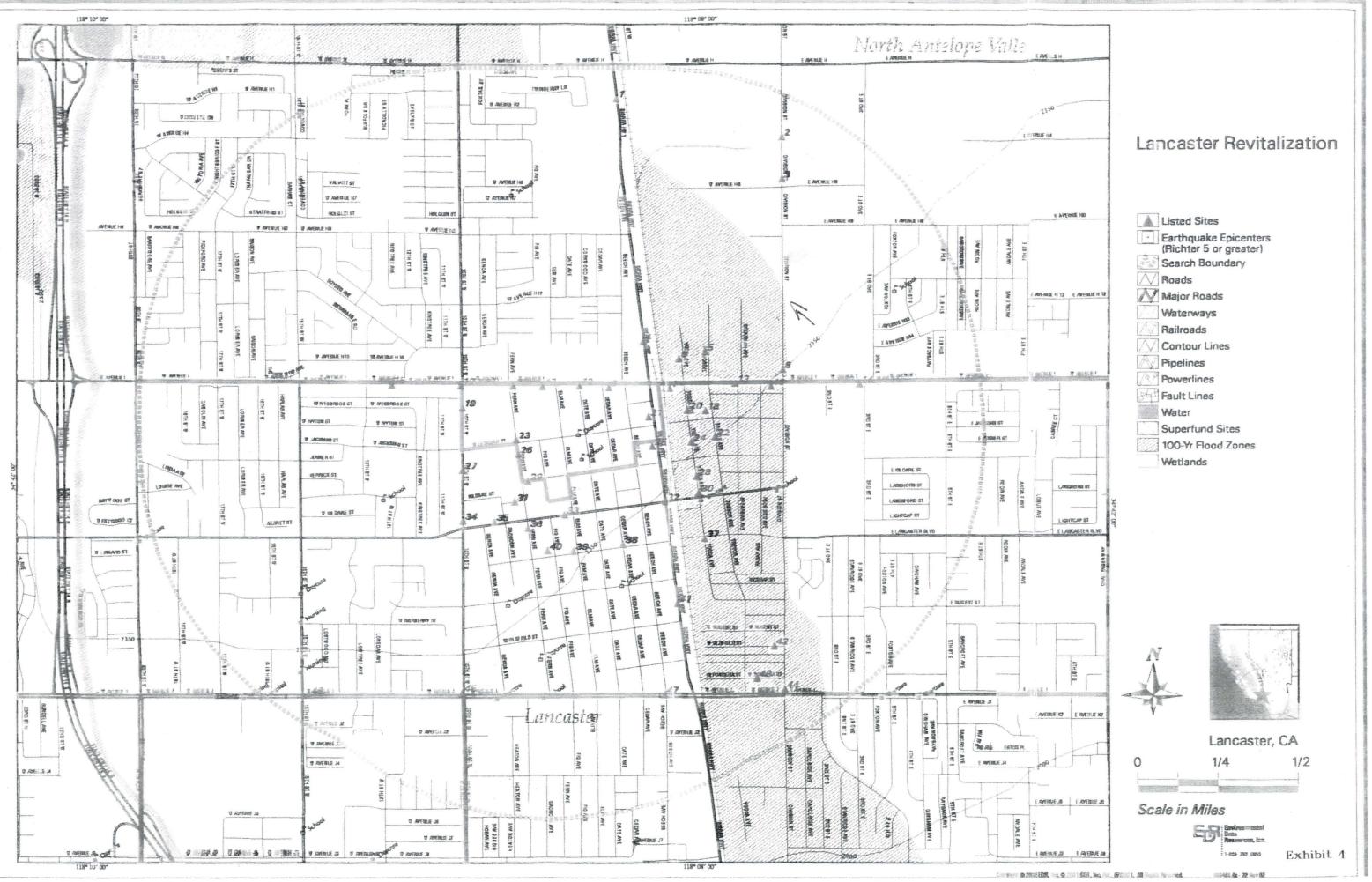
A "historic recognized environmental condition" (HREC) is defined as a condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. HRECs are generally conditions which have in the past been remediated to the satisfaction of the responsible regulatory agency. No HRECs have been identified within the boundaries of the subject site; however, it should be noted that the northern portion of the subject site has historically been utilized for auto repair and maintenance services.

#### 1.2.7 Historical Use(s) Information

Based upon evaluation of the documented land use as demonstrated in the reviewed resources, the series of historic aerial photographs and maps, and the site inspection, the potential that adverse environmental conditions were created by previous uses of the subject site is considered to be probable.

Typically, common chemical wastes from on-site maintenance operations include oil and grease, solvents from parts cleaning and repair work, and gasoline. The historical maintenance uses/materials within the northern industrial uses are considered to create a potential recognized environmental condition.





#### 1.2.8 Opinions/Recommendations

Based on the records and other data reviewed during the preparation of this Phase I Environmental Site Assessment, in accordance with ASTM Standard Practice E 1527-00 and the scope-of-services, and subject to the limitations thereof, current site conditions warrant further assessment.

The following measures are recommended prior to and during the demolition/construction phase:

Demolition and construction activities are assumed to be part of the North Downtown Neighborhood Revitalization/Transit Village Plan. At least one (1) on-site property (610/630 West Avenue I) has reported subsurface petroleum releases within the northern portion of the subject site. The property has impacted soil and groundwater; however, the extent of lateral contamination remains undefined. Additionally, one (1) off-site property located at 44949 10<sup>th</sup> Street West has contaminated groundwater which underlies the subject site's southwestern boundary.

Should construction/demolition require dewatering activities or groundwater is expected to be encountered, a qualified hazardous materials consultant with Phase II and Phase III experience should review groundwater documents regarding site characterization and/or closure status for 610/630 West Avenue I and 44949 10<sup>th</sup> Street West.

- Polychlorinated Biphenyl (PCB) fluids may be present within hydraulic lifts located within the interior of the on-site shops associated with automobile maintenance. The primary concern with hydraulic lifts is the potential for subsurface contamination associated with hydraulic fluid leakage from the lift's piston. Therefore, it is RBF's opinion that, at minimum, the hydraulic fluids should be tested to determine the presence or absence of PCBs. Additional confirmation samples should be collected around the pistons to determine if a subsurface release of hydraulic fluids has occurred. If found, appropriate remedial measures should be implemented to the satisfactory of the lead regulatory agency.
- Based upon the year the existing structures located on the subject site were built (prior to 1978), lead-based paint and asbestos may be present within the structures and would need to be handled properly prior to any remodeling or demolition activities.
- All stained concrete should be removed and disposed of to an appropriate permitted facility. Once removed, exposed soils should be visually observed to confirm the presence/absence of staining (an indication of contamination migration into the subsurface). If observed, stained soils should be tested to identify appropriate remedial activities (if necessary).
- The interior of individual on-site structures within the project site should be visually inspected prior to demolition or renovation activities, with particular attention to all industrial uses. Should hazardous materials be encountered with any on-site structure, the materials should be tested and properly disposed of in accordance with State and Federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be



sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.

- If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contract shall:
  - Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
  - Notify the Project Engineer of the implementing Agency;
  - Secure the area a directed by the Project Engineer; and
  - Notify the implementing agency's Hazardous Waste/Materials Coordinator.

### **1.3 SCOPE OF SERVICES AND METHODOLOGY USED**

The scope of this Phase I Environmental Site Assessment (ESA) follows guidance provided in American Society for Testing Materials (ASTM) Standard Practice E 1527-00. The ASTM 1527-00 document outlines a procedure for completing ESAs that includes a review of records, site reconnaissance, and interviews where possible. The ASTM document recommends the following regulatory database search distances from a property:

- National Priorities List (NPL)-1.0 mile
- RCRA Corrective Action Report (CORRACTS)-1.0 mile
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS/NFRAP)-0.5 mile
- RCRA Permitted Treatment, Storage, Disposal Facilities (RCRA-TSD)-0.5 mile
- RCRA Registered Small or Large Generators of Hazardous Waste (GNRTR)-0.125 mile
- State CERCLIS (SCL)-0.5 mile
- State Equivalent Priority List (SPL)-1.0 mile
- Toxic Release Inventory Database (TRIS)-0.25 mile
- Leaking Underground Storage Tanks (LUST)-0.5 mile
- Solid Waste Landfill List (SWLF)-0.25 mile
- RCRA Violations/Enforcement Actions (RCRA Viol)-0.25 mile
- Registered Underground or Aboveground Storage Tank Database (UST/AST)-0.25 mile
- ERNS and State Lists (SPILLS)-0.125 mile

The objectives of the Phase I Environmental Site Assessment contained herein are as follows:

- Evaluate the potential for hazardous materials on the subject site based upon readily discernible and/or documented present and historic uses of the property and uses immediately adjacent to the site; and
- Generally characterize the expected nature of hazardous materials that may be present as a result of such uses, within the limits imposed by the scope of this Assessment.



This Assessment is not intended to provide specific qualitative or quantitative information as to the actual presence of hazardous materials at the site, merely to identify the potential presence based on available information. To achieve the objectives of this Assessment, RBF conducted a Phase I Environmental Site Assessment of the subject site to provide preliminary conclusions relative to site conditions.

The assessment included the following components, which are designed to aid in the discovery and evaluation of recognized environmental conditions:

- RBF performed a site visit on December 19, 2002, which consisted of a visual examination of the subject site for visual evidence of potential environmental concerns including existing or potential soil and groundwater contamination, as evidenced by soil or pavement staining or discoloration, stressed vegetation, indications of waste dumping or burial, pit, ponds, or lagoons; containers of hazardous substances or petroleum produces; electrical and hydraulic equipment that may contain polychlorinated biphenyls (PCBs), such as electrical transformers and hydraulic hoists; and underground and above ground storage tanks. RBF observed the physical characteristics of the property (i.e., apparent runoff directions, location of paved areas, etc.). It should be noted that the site visit specifically excluded any subsurface investigation including, but not limited to, sampling and/or laboratory analysis.
- An investigation of historical use of the subject site by examining locally available aerial photographs (one source) and other readily available historical information, for evidence of potential environmental concerns associate with prior land use.
- A review of information available on general geology and topography of the subject property and local groundwater conditions.
- A review of environmental records available from the property owner or site contact including regulatory agency reports, permits, registrations, and consultant's reports for evidence of potential environmental concerns.
- A site property line visual assessment of adjacent properties for evidence of potential off-site environmental concerns that may affect the subject property.
- A review of a commercial database summary (provided by Environmental Data Resources, Inc.), of federal, state and local regulatory agency records pertinent to the subject property and off site facilities located within ASTMspecified search distances for the subject property.
- Interviews with key site personnel, as available, regarding current and previous uses of the subject site, particularly activities involving hazardous substances and petroleum products.
- RBF compiled the data reviewed, discussed findings, formulated conclusions, opinions and recommendations, and prepared this written report presenting the findings of the Phase I Environmental Site Assessment.



The performance of the Phase I ESA was not limited by any extraordinary conditions or circumstances.

### **1.4 LIMITING CONDITIONS OF ASSESSMENT**

The findings and professional opinions of RBF are based on the information made available to RBF (listed in Section 6.0) from public records, and should be understood to be preliminary only. RBF makes no warranties either expressed or implied, concerning the completeness of the data made available to us for this study and withholds certification of any type concerning the presence or absence of contamination of the subject site. RBF is not responsible for the quality or content of information from these sources. The report states our conclusion based on the limitations of our Scope-of-Services, in accordance with generally accepted standards for a Phase I Environmental Site Assessment.

Subsurface exploration, geologic mapping, laboratory testing of soil or water samples, lead and asbestos sampling, and operations/inventory review of adjacent uses were not performed in connection with this Assessment. This Assessment represents our professional judgement, based on the level of effort described above, as to the present potential for hazardous materials at the site.

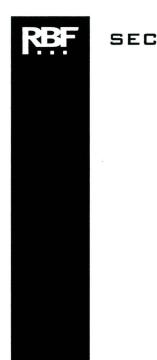
Subsurface exploration, sampling and laboratory testing should be performed if it is deemed necessary or required to quantify the actual absence or presence of hazardous materials and recommend possible remediation measures for such hazardous materials (a "Phase II" investigation).

This Assessment addressed the likelihood of the presence of hazardous substances and/or petroleum products resulting from past and current known uses of the property and nearby properties. Certain conditions, such as those listed below, may not be revealed:

- Naturally occurring toxins in the subsurface soils (i.e., radon), rocks, or water, or toxicity of the on-site flora;
- Toxicity of substances common in current habitable environments, such as stored household products, building materials, and consumables;
- Biological pathogens;
- Subsurface contaminant plume from a remote source;
- Contaminants or contaminant concentrations that do not violate present regulatory standards but may violate such future standards; and
- Unknown site contamination, such as "midnight dumping" and/or accidental spillage which could have occurred after RBF's site visit.

The information and opinions rendered in this Assessment are exclusively for use by the City of Lancaster. RBF will not distribute or publish this report without the consent of the City of Lancaster except as required by law or court order. The information and opinions expressed in this Assessments are given in response to RBF's Scope-of-Services and Limitations indicated above and should be considered and implemented only in light of the Scope-of-Services and Limitations. The services provided by RBF in completing this Assessment were consistent with normal standards of the profession. No warranty, expressed or implied, is made.





# SECTION 2

SECTION 2

# PHYSICAL SETTING

Physical setting sources typically provide information regarding geologic, hydrogeologic, hydrologic, or topographic characteristics of a property. The following information is primarily based on review of the United States Geological Survey (USGS) Lancaster West, California, Quadrangle, dated 1974, review of the Soil Survey of Los Angeles County, dated 1969, and a site inspection conducted by RBF on December 19, 2002. Other miscellaneous resources utilized within this section and throughout the Assessment are referenced in Section 6.0, REFERENCES.

### 2.1 SUBJECT SITE DESCRIPTION

The following discussions provide a detailed description of the subject site:

2.1.1 Location The subject site is located within the City of Lancaster, County of Los Angeles, State of California (T. 6S., R. 9W., Sec. 16 and 21, SBBM). More specifically, the subject site comprises approximately 103 acres generally located south of Avenue I, east of 10<sup>th</sup> Street West between Avenue I and Jackman Street, east of Fern Avenue between Jackman Street and Kettering Street, north of Jackman Street between 10<sup>th</sup> Street West and west North Sierra Highway.

### 2.1.2 Current Use(s) of the Subject Site

The subject site currently contains mixed residential, commercial, institutional, and public land uses (local government), which is served by a grid system of local paved roadways. The subject site contains several prominent uses including Sacred Heart Catholic Church and School, the Antelope Valley Senior Center, the Salvation Army, Homeless Solutions Assessment Center and the Grace Resources Center. Additional educational facilities include the Adventist School and childcare facilities.

Residential uses within the project area consist of a mix of single-family residences, duplexes, triplexes, small apartments and several large-scale apartment complexes. Three (3) of the large-scale complexes are for senior housing. Age and condition of the housing varies greatly; newer apartment complexes are generally in good condition, while older residential structures show signs of age. Many of the single-family residences and smaller-scale multiple-family housing units are in need of minor (cosmetic) to major rehabilitation.

Commercial uses are prominent along Avenue I and along the western side of Sierra Highway. West of Fern Avenue, uses are generally retail in character, including fast-food restaurants and a discount grocery store. East of Elm Avenue and along Sierra Highway the commercial uses consist primarily of vehicle-related businesses including auto parts stores, tire stores and automobile sales and repair. The condition of this commercial area declines from west to east. It should be



noted that the only significant area of undeveloped land (vacant lot) is located at the northeast corner of 10<sup>th</sup> Street West and Jackman Street.

#### 1.1.3 Description of On-Site Structures

Multiple structures are located within the boundaries of the subject site. The majority of the on-site structures are utilized as residential uses, which consist of both multi-and single-family housing. In addition to residential uses, on-site structures are utilized for commercial uses (retail and grocery stores), institutional uses (schools and churches), and light-industrial uses that are primarily utilized for automotive services. The on-site structures appeared to be situated on concrete foundations, of wood frame construction with either stucco or brick siding.

#### 2.1.4 Zoning/Land Use Records

Zoning/land use records generally consist of records of the local government in which the subject site is located and indicates the use permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. The subject area contains a mix of land use and zoning designation, including residential, commercial, business and industrial uses. Implementation of the proposed project improvements would be consistent with the City of Lancaster General Plan and Zoning Map.

### 2.2 TOPOGRAPHY

The United States Geological Survey (USGS) 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 factors that impact the spread of contamination. Additionally, the maps depict topography through color and contour lines and are helpful in determining elevations and site latitude and longitude. Based on the USGS Lancaster West, California Quadrangle, photorevised in 1974, on-site topography is approximately 2,340 feet above mean sea level (msl) and gently slopes to the northwest. No pits, ponds, or lagoons, within the subject site were noted on this topographical map.

### 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 subject site. An adjoining property is considered any real property or properties the border of which is contiguous or partially contiguous with that of the subject site, or that would be contiguous or partially contiguous with that of the subject site but for a street, road, or other public thoroughfare separating them. An adjacent property is any real property located within 0.25 miles of the subject site's border. The following is a detailed description of each adjoining land use observed on December 19, 2002:

- North: Avenue I adjoins the subject site to the north. Commercial and residential uses are present opposite of Avenue I. Additionally, Whit Carter Park is located to the north, past Holguin Avenue.
- East: Sierra Highway bisects a portion of the subject site's eastern boundary. The Metrolink Railroad and commercial/light industrial uses adjoin the subject site to the east opposite of the railroad. Vacant lots are also



present, as well as the Antelope Valley Fairgrounds and Antelope Valley High School.

- South: Lancaster Boulevard adjoins the subject site's southern boundary. Mixed uses (commercial, residential, and institutional) are located to the south of Lancaster Boulevard. Local government uses and the Lancaster Performing Arts Center are also present to the south.
- West: 10<sup>th</sup> Street West bounds the subject site's western border. Adjoining uses primarily consist of residential uses and one (1) school. State Route 14 (SR-14) is located approximately one-mile to the west.

### 2.4 **GEOLOGIC CONDITIONS**

#### 2.4.1 Geology

The United States Geological Survey (USGS) Geological Map Index was searched by Environmental Data Resources, Inc. for available Geological Maps which cover the subject site and surrounding areas. These Geological Maps indicate geological formations which 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 and other factors that influence the spread of contamination. No geologic map was reviewed during the course of this Assessment. However, relevant regional geologic information was obtained during the January 8, 2003 file review at the Regional Water Quality Control Board (RWQCB) and is described below:

The subject site is generally located in the south-central Antelope Valley within the Mojave Desert Geomorphic Province. The Mojave block is roughly triangular in shape and is bounded to the south by the San Andreas Fault, the Garlock fault to the north, while the eastern boundary is transitional and corresponds with the beginning of the Basin and Range province, which is dominated by North-South trending block faulting. The Antelope Valley is primarily comprised of non-marine Quaternary alluvium, volcanoclastics, lake-bed sediments, and evaporites.

#### 2.4.2 Soils

According to the *Soil Survey of Los Angeles County*, the subject site is situated on the Pond-Tray-Oban association, which occurs on nearly level valley troughs or basins between elevation of 2,310 and 2,400 feet. Pond soils are over 60 inches deep, are moderately well drained and have moderately slow subsoil permeability. Tray soils are over 60 inches deep, are moderately well drained, and have moderately slow subsoil permeability. Oban soils are over 60 inches deep, are moderately well drained, and have moderately slow subsoil permeability. Oban soils are over 60 inches deep, are moderately well drained, and have moderately slow subsoil permeability. Oban soils are over 60 inches deep, are moderately well drained, and have slow subsoil permeability. Pond soils make up approximately 55 percent, Tray soils 30 percent, and Oban soils 15 percent of the association. These soils are used primarily for spring range and for wildlife and recreation. With the leaching of soluble salts, selected area are used for irrigated alfalfa and small grain.

In addition to the soil survey, RBF identified that soils within the boundaries of the subject site consist of fine to medium-grained sand with interbedded silt and slightly clayey silt. Below 50 feet the soil consists of a mixture of clayey silt and slity clay.

1.4.3 Radon Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. Radon is an invisible, odorless, inert gas which emits alpha particles, known to cause lung cancer. Radon levels are highest in basements (areas in close proximity to the soil) that are poorly ventilated. It should be noted that a radon survey was not



included within the scope of this investigation. However, according to the "U.S. EPA Map of Radon Zones," the County of Los Angeles is located within Zone 2 which has a predicted average indoor screening level between 2.0 and 4.0 Picocuries per liter (pCi/L). EPA recommends remedial actions when radon levels are greater than 4.0 pCi/L (refer to Appendix B, *Documentation*).

### 2.5 **BIOLOGICAL SETTING**

The biotic community that exists within the vicinity of the subject site is typical of most urbanized areas. Plants and animals in the area have been introduced by man and are tolerant to urban land uses.

### 2.6 DRAINAGE/HYDROLOGY

- 2.6.1 Drainage Due to the impervious nature of the majority of the subject site, drainage of the site is accomplished by overland sheet flow, which is generally in a northwesterly direction. Surficial water flow eventually enters the City's storm water system via drainage improvements associated with on-site roadways.
- 2.6.2 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 Database search, the subject site is not located within a 100-year flood zone However, it should be noted that a 100-year flood zone is located immediately to the east of the subject site, opposite of the Metrolink railroad. Refer to the EDR Area Study Map located in Appendix A, *EDR Search*, for an illustration of the 100-year flood zone vicinity.

### 2.7 GROUNDWATER AND WATER WELLS

No technical groundwater or water well data was readily available during the preparation of this Assessment. As a result, RBF assumes groundwater flow would follow the slope of the ground surface elevations towards the nearest open body of water or intermittent stream. However, relevant groundwater information was obtained during the January 8, 2003 file review at the RWQCB and is briefly described below:

The subject site and immediate vicinity is located in the Lancaster Subbasin of the Antelope Valley Groundwater Basin. The principal water-bearing zone in this subbasin is separated from deeper water-bearing zones by a massive clay layer approximately 100-feet thick. Regional groundwater is expected at approximately 140 to 160 feet below ground surface (bgs); regional groundwater flow direction is generally toward the east or southeast. However, it should be noted that flow directions vary and may be affected by water supply wells in the area. It was also noted that a perched water zone is present in a large portion of the Lancaster Subbasin. This regional perched zone contains high concentrations of bacteria, chloride, dissolved solids, nitrate, and pesticides.

According to groundwater monitoring reports within the vicinity of 610 West Avenue I, depth to groundwater measured in on-site monitoring wells (predominately clay lithology) varied from approximately 48-51.65 feet bgs. Groundwater flow direction



was noted to vary within the boundaries of the subject site and immediate vicinity (refer to Appendix B, *Documentation*).





# SECTION 3

# HISTORICAL AND REGULATORY INFORMATION SEARCHES

The ASTM Phase I Standard (E1527-00) allows discretion in choosing from among eight standard sources, plus "other" non-specific sources (other non-specific sources can include newspaper archives and records in the files and/or personal knowledge of the property owner and/or occupants). The standard sources are fire insurance maps, historical topographic maps, street directories, aerial photographs, property tax files, building department records, planning department records, and a chain-of-title. The focus is on usage rather than ownership, which is why a chainof-title is not required and not sufficient by itself.

Historical subject site use information was obtained from **1910** to the present. Per ASTM, historical uses "shall be identified from the present, back to the **property's obvious** first development use [including agricultural and fill activities], or back to 1940, which ever is **earlier**."

# 3.1 HISTORICAL SITE USAGE

The following historical information is based upon review of available historical maps and documents, available public information, interviews, and a review of a series of historical aerial photographs dating from 1953 to 1994.

### 3.1.1 Interviews

### 3.1.1.1 Los Angeles County Fire Authority

RBF contacted the Los Angeles County Fire Authority (LACFA) on December 3, 2002 to determine if any hazardous material releases or spills have occurred within the boundaries of the subject site. According to Department Staff, no records are currently maintained for the subject site. (refer to Appendix B, *Documentation*).

### 3.1.1.2 County of Los Angeles Health Care Agency

RBF interviewed the Custodian of Records with the County of Los Angeles Health Care Agency on December 2, 2002 regarding the subject site in an effort to determine whether the subject site has been under investigation of any hazardous materials regulations. Agency files typically contain information of underground/aboveground storage tanks and hazardous usages/storage based on a street address. According to the agency's records, none of the on-site facilities have been under investigation of any hazardous materials regulations (refer to Appendix B, *Documentation*).

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### 3.1.1.3. Regional Water Quality Control Board

RBF contacted the Custodian of Records with the Regional Water Quality Control Board (RWQCB) -Lahontan Region, on December 4, 2002 within regards to properties listed in the Environmental Data Resources (EDR) Database Search. The RWQCB is generally the lead agency for properties that have reported subsurface releases of petroleum products. RBF submitted such properties to the RWQCB on December 4, 2002 and requested a file review in order to determine the lateral and vertical extent of contamination with respect to the subject site. An appointment to review files at the RWQCB's office was scheduled for January 8, 2003 (refer to Appendix B, *Documentation*). Refer to Section 3.2., *File Review*, below, for a discussion of findings.

#### 3.2.1 Documentation

#### 3.2.1.1 Building Department Records

Building Department Records are those records of the local government in which the subject site is located indicating permission of the local government to construct alter, or demolish improvements on the property. The purpose for a records review is to obtain and review available building permit records which would help to evaluate potentially recognizable environmental condition(s) which could be connected with the subject site.

Due to the nature of the proposed improvements and overall size of the subject site, RBF requested building department records for non-residential properties located within the boundaries of the subject site. Generally, information concerning minor improvements/alteration and other miscellaneous modifications (e.g. electric, plumbing, signage, repairs, etc.) to the existing properties was noted during the research. Information with respect to hazardous materials (UST, wash rack, and hazardous material records) were noted for sites primarily associated with automobile service and repair. Table 1, *Building Department Summary*, below, summarizes the building records for each available property. Copies of relevant Building Department Records are presented in Appendix B, *Documentation*.



Table 1				
<b>Building Department Recor</b>	d Summary			

Site Address	Reported Land Use	Years Reviewed	Record Summary	
45031 North Sierra Highway	Retail Store Building	1957-1996	Electrical improvement records.	
45057 Sierra Highway	Signage/Building	1970-2000	No hazardous materials identified.	
45053 Sierra Highway	Residential Dwelling	1952	No hazardous materials identified.	
45125 ½ Sierra Highway	Residential	1959-1976	Demolition records.	
45051 North Cedar	Abandoned Residential	1963-1967	Fire damage repairs.	
45044 Date Avenue	Sacred Heart Catholic Church	1972-1997	Fire damage, repairs.	
45032 Date Avenue	Residence	1949-1993	Carport construction records.	
856 Date Avenue	Residence/School	1949	None.	
45021 Date Avenue	School	1970-1977	Room alteration records, Conditional Use Permit	
45045 Date Avenue	School	1949-1995	Room additions, sewer improvements.	
45105 Sierra Highway	Used Car Office	1947-1969	Plumbing and heating records.	
745 Sierra Highway	NA	1950	None.	
44938 Cedar Avenue	Residence	1956	None.	
521 Kettering Street	Church	1954	None.	
45001 Beech Avenue	Church of Christ/School	1947-1998	Chapel construction, heating, plumbing.	
45007 Cedar Avenue	Scared Heart Church	1970-2000	Soil compaction report.	
45045 Sierra Highway	Residence	1973	Building demolition, structure removed.	
817 Sierra Highway	NA	1942	None.	
518 Avenue I	NA	1958-1996	Electrical records.	
45001 Cedar Avenue	NA	1961-1970	Electrical, plumbing records.	
45007 Cedar Avenue	Church	1954-1966	Plumbing, construction records.	
666 Avenue I	Shop/Storage	1941-1964	No hazardous material noted in records.	
45103-105 Sierra Avenue	Office/Storage/Dwelling	1935-1981	None.	
832 Avenue I	Kingsley Glass (Sales/Storage)	1969-1979	Electrical and heating records.	
826 Avenue I	Restaurant (A&W), Drive-In	1964-1988	Signage, roof repairs, water certification records	
45067 Date Avenue	Church	1951-1971	None.	
554-564 Avenue I	Store with Parking/Residence	1967-1969	Drainage improvements, signage, air.	
528 Avenue I	ABC Radiator, Auto Repair	1958-1994	Signage, wastewater permit, irrigation plans. UST building/installation permit noted.	
45167 Fern Avenue	Fern Car Wash-Self Serve	1960-1991	Waste Discharge Permit #10320, sump and waste permit violation noted.	
45151 Sierra Highway	Repair Garage (auto)	1960-1971	Signage, gas, garage repairs noted.	
810 Avenue I	KFC Restaurant	1966-1992	Heating, sewer, signage, plumbing records.	



622 Avenue I	Tire Sales (Pacific, Delta, Winston)	1971-1999	Site plans, past fire damage, electrical, signage, and plumbing records.
45083 Sierra Highway	Signage Structure	1961-1962	None.
802 Avenue I	Gas Service Station	1964-1985	10,000 gallon UST installed 9/30/1975. Pump islands and canopy construction records noted (1964). Site plans included.
650 Avenue I	Service Garage & Auto Sales	1947-1975	No evidence of USTs noted.
45181 Fern Street	Auto Oil Changers	1976	Commercial auto change station. Backfill records reviewed. <b>On-site sump for waste-oil.</b>
45007 Cedar Avenue	Church	1978-2001	Building construction/alterations.
548 Avenue I	Retail Liquor Store	1963-1998	Standard electric, plumbing records reviewed.
45124 10th Street West	Grocery Store/Retail	1995-2002	No hazardous materials reported on-site.
866 Avenue I	Gas Station-Shell Oil Co.	1968-2002	USTs installed in 8/21/68. Removal of four (4) USTs and one (1) waste oil tank reported on 2/22/2002. Minor island and pump changes reported.
45159 Sierra Highway	Shell Oil/Express Lube Detailing	1943-1990	Modifications to UST 1970. Removal of USTs in 1990; additional tanks found.
45117 Sierra Highway	Retail/Shop (New Car Sales)	1952-1981	Wash racks noted on-site in 1975. Auto garage with no gasoline/hazardous materials reported. Paint booth noted on-site.
610 Avenue I	Auto Service/Repair Garage	1959-1997	Nine (9) USTs removed 12/9/1997 (Permit #194408). No unauthorized releases reported.

# 3.2.1.2 Recorded Land Title Records

Recorded land titles are records usually maintained by the municipal clerk or county recorder of deeds which detail ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against the subject site within the local jurisdiction having control for or reporting responsibility to the subject site. Due to state land trust regulations and laws, land title records will often only provide trust names, bank trust numbers, owner's names, or easement holders, and not information concerning previous uses or occupants of the subject site. Additionally, environmental liens recorded against the subject site are, at times, considered outside the scope of recorded land title records. For these reasons, this Assessment has relied upon other standard historical information sources assumed to be either more accurate or informative than recorded land titles.

# 3.2.1.3 Property Data

RBF reviewed property data for the subject site provided by the City of Lancaster and *DataQuick 2001*. This data generally provides current property ownership information and includes information regarding on-site improvements, zoning, land use, transfer of last sale, and other miscellaneous structural improvements. Table 2, *Property Data Summary*, below, lists those on-site properties with reasonably ascertainable property data.



Assessors Parcel Number (APN)	Street Address	Land Use	Acres (AC
3133027004	45012 Fern Ave	MFR	4.448
3133028010	45056 Fig Ave	MFR	0.202
3133028009	45048 Fig Ave	MFR	0.202
3133028008	45048 Fig Ave	MFR	0.202
3133028007	45036 Fig Ave	MFR	0.203
3133028006	45032 Fig Ave	MFR	0.203
3133028005	45022 Fig Ave	MFR	0.203
3133028003	45024 Fig Ave	MFR	0.203
3133028004	45020 Fig Ave	MFR	0.203
3133028003	45002 Fig Ave	MFR	0.203
3133028002	00723 Kettering St.	MFR	0.203
3133028001	00723 Rettering St.	Vacant-Residential	0.202
3133028013	00000.1 Elm Ave	Vacant-Residential	0.203
3133028014	00000.2 Elm Ave	Vacant-Residential	0.203
3133028015	00000.3 Elm Ave	Vacant-Residential	0.202
3 3 3 3 6	00000.4 Elm Ave	Vacant-Residential	0.203
3133028017	00000.5 Elm Ave	Vacant-Residential	0.202
3133028018		and the second	
3133028024	00000.7 Elm Ave 45013 Elm Ave	Vacant-Residential	0.218
3133028021		SFR	0.202
3133028022	45007 Elm Ave	SFR	0.202
3133028023	00000.8 Elm Ave	Vacant-Residential	0.206
3134008009	45056 Elm Ave	SFR	0.202
3134008010	45050 Elm Ave	SFR	0.204
3134008011	45044 Elm Ave	SFR	0.203
3134008012	45038 Elm Ave	SFR	0.204
3134008013	45032 Elm Ave	SFR	0.204
3134008014	45026 Elm Ave	MFR	0.204
3134008015	45020 Elm Ave	SFR	0.204
3134008016	45014 Elm Ave	MFR	0.204
3134008017	45004 Elm Ave	MFR	0.203
3134008018	45002 Elm Ave	MFR	0.218
3134008008	45047 Date Ave	Institutional-Church	0.202
3134008007	45045 Date Ave	Institutional-School	0.611
3134008006	00000.1 Date Ave	Vacant-Residential	0.204
3134008005	45027 Date Ave	Vacant-Residential	0.203
3134008004	45021 Date Ave	Institutional-Church	0.204
3134008003	45015 Date Ave	MFR	0.203
3134008002	00000.2 Date Ave	Vacant-Residential	0.204
3134008001	45003 Date Ave	MFR	0.223
3134007034	00000.1 Date Ave	Institutional-Church	0.429
3134007035	45044 Date Ave	Vacant-Residential	0.216
3134007036	45038 Date Ave	MFR	0.216
3134007024	45032 Date Ave	Institutional-Church	0.18
3134007022	45001 Cedar Ave	Institutional-School	1.686
3134007033	45051 Cedar Ave	Institutional-Church	0.426
3134007032	45045.1 Cedar Ave	Institutional-Church	0.424
3134007031	45027.1 Cedar Ave	Institutional-Church	0.425

# Table 2 Property Data



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3134007023	45007.1 Cedar Ave	Institutional-Church	0.521
3134006012	00556 Jackman St	MFR	0.198
3134006013	45050 Cedar Ave	MFR	0.203
3134006014	45044 Cedar Ave	MFB	0.203
3134006015	45038 Cedar Ave	MFR	0.203
3134006016	45030 Cedar Ave	MFR	0.203
3134006017	45026 Cedar Ave	MFR	0.203
3134006018	00000.6 Cedar Ave	Vacant-Residential	0.204
3134006019	00000.7 Cedar Ave	Vacant-Residential	0.204
3134006020	45006 Cedar Ave	MFR	0.204
3134006020	45002 Cedar Ave	Vacant-Residential	0.203
3134006011	00544 Jackman St	SFR	0.224
3134006010	45051 Beech Ave	MFR	0.202
3134006009	45045 Beech Ave	MFR	0.202
3134006008	45041 Beech Ave	SFR	0.203
3134006007	45039 Beech Ave	SFR	0.101
3134006007	45039 Beech Ave	Vacant-Residential	0.102
3134006005	45027 Beech Ave	MFR	0.203
3134006003	45027 Beech Ave	MFR	
3134006004	45015 Beech Ave	SFR	0.202
3134006003		Institutional-Church	0.203
	45001 Beech Ave		0.425
NA	NA Fig Ave.	ROW	0.823
NA	NA Alley	ROW	0.275
NA	NA Elm Ave	ROW	0.818
NA	NA Alley	ROW	0.269
NA	NA Date Ave.	ROW	0.817
NA	NA Alley	ROW	0.269
NA	NA Cedar Ave.	ROW	0.818
NA	NA Alley	ROW	0.269
3133001004	45109 Fern Ave	SFR	0.22
3133001009	00000.1 Jackman	Vacant	1.59
3134005021	45048.1 Beech Ave	MFR	0.811
3134005904	00000.1 Beech Ave	Non-Res-Commercial	0.203
3134005024	45057 Sierra Hwy	Commercial-Auto Service	0.202
3134005010	45053 Sierra Hwy	Commercial-Auto Service	0.202
3134005009	45045 Sierra Hwy	Non-Res-Commercial	0.203
3134005008	45037 Sierra Hwy	Non-Res-Commercial	0.203
3134005007	45031 Sierra Hwy	Non-Res-Commercial- store	0.203
NA	Sierra Hwy	Non-Res-Park & Ride	1.400
NA	Sierra Hwy	Non-Res-Vacant	0.808
NA	Sierra Hwy	Non-Res-Park & Ride	0.992
NA	45134 Sierra Hwy	Non-Res-Grace Resource	0.993
3134001029	666 Avenue I	Commercial-Auto Service	0.32
3134001002	45168 Elm Ave	SFR	0.283
3134001003	45162 Elm Ave	SFR	0.203
3134001004	45156 Elm Ave	SFR	0.203
3134001005	45150 Elm Ave	SFR	0.203
3134001006	45144 Elm Ave	MFR	0.203
3134001007	45138 Elm Ave	SFR	0.203
3134001008	45132 Elm Ave	SFR	0.203
3134001009	45126 Elm Ave	SFR	0.203



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3134001010	45120	Elm Ave	SFR	0.203
3134001011	45110	Elm Ave	MFR	0.203
3134001012	45108	Elm Ave	SFR	0.203
3134001030	665	Jackman St	SFR	0.224
3134001028	650	Avenue I	Commercial-Auto Service	0.58
3134001025	45161	Date Ave	MFR	0.207
3134001024	45153	Date Ave	MFR	0.207
3134001023	45149	Date Ave	MFR	0.19
3134001022	45145	Date Ave	SFR	0.189
3134001021	45139	Date Ave	MFR	0.208
3134001020	45133	Date Ave	SFR	0.208
3134001019	45127	Date Ave	MFR	0.208
3134001018	45121	Date Ave	MFR	0.208
3134001031	45111	Date Ave	Institutional-School	0.416
3134001015		NW c/o Date/Jack	Vacant	0.224
3134002029	622	Avenue I	Commercial-Auto Service	0.226
3134002013	45166	Date Ave	SFR	0.204
3134002014	45160	Date Ave	Vacant-Residential	0.173
3134002015	45156	Date Ave	SFR	0.235
3134002016	45148	Date Ave	MFR	0.204
3134002017	45142	Date Ave	MFR	0.204
3134002018	45138	Date Ave	SFR	0.204
3134002019	45134	Date Ave	SFR	0.204
3134002020	45126	Date Ave	SFR	0.204
3134002028	45122	Date Ave	SFR	0.204
3134002023	45114	Date Ave	SFR	0.204
3134002024	45108	Date Ave	MFR	0.204
3134002025	45104	Date Ave	SFR	0.217
3134002027	610	Avenue I	Commercial-Auto Service	0.541
3134002009	45157	Cedar Ave	MFR	0.199
3134002008	45151	Cedar Ave	SFR	0.199
3134002007	45145	Cedar Ave	SFR	0.198
3134002006	45133	Cedar Ave	SFR	0.397
3134002005	45127		SFR	0.199
3134002004	45119	Cedar Ave	MFR	0.199
3134002003	_	Cedar Ave	MFR	0.198
3134002002	Contraction of the second	Cedar Ave	SFR	0.198
3134002001	45101		MFR	0.207
3134003027	554	Avenue I	Commercial-Retail	0.288
3134003030		SE c/o I/Cedar	Vacant- Industrial	0.142
3134003024	45156		Vacant-Residential	0.233
3134003023	45148		MFR	0.204
3134003022	45142		MFR	0.203
3134003021	45138		SFR	0.136
3134003020	45134		SFR	0.135
3134003019	45128		MFR	0.203
3134003018	45124		MFR	0.136
3134003017	and the second s	Cedar Ave	SFR	0.203
3134003017		Cedar Ave	MFR	0.203
3134003015	557	Jackman St	MFR	0.203



3134003001	548 Avenue I	Commercial-Retail	0.221
3134003002	45163 Beech Ave	Vacant-Residential	0.172
3134003003	45157 Beech Ave	SFR	0.172
3134003004	00000.4 Beech Ave	Vacant	0.173
3134003005	00000.5 Beech Ave	Vacant-Commercial	0.086
3134003006	00000.6 Beech Ave	Vacant-Commercial	0.087
3134003007	45141 Beech Ave	SFR	0.172
3134003008	45135 Beech Ave	SFR	0.171
3134003009	00000.7 Beech Ave	Vacant-Commercial	0.344
3134003010	45119 Beech Ave	MFR	0.204
3134003011	45115 Beech Ave	MFR	0.201
3134003012	45107 Beech Ave	MFR	0.203
3134003029	551 Jackman St	SFR	0.055
3134003028	45103 Beech Ave	SFR	0.15
3134004009	528 Avenue I	Industrial-Lite Mnf Print	0.302
3134004010	518 Avenue I	Industrial-Lite Mnf Print	0.142
3134004011	525 Ivesbrook St	Industrial-Lite Mnf Print	0.464
3134004019	530 Ivesbrook St	SFR	0.206
3134004017	520 Ivesbrook St	SFR	0.103
3134004029	45124 Beech Ave	SFR	0.103
3134004001	45120 Beech Ave	SFR	0.204
3134004002	45114 Beech Ave	SFR	0.172
3134004003	45108 Beech Ave	SFR	0.172
3134004004	521 Jackman St	Vacant-Residential	0.265
3134004023	45159 Sierra Hwy	Commercial-Auto Service	0.37
3134004012	NA Ivesbrook St	Vacant-Industrial	0.155
3134004028	45151 Sierra Hwy	Commercial-Retail	0.31
3134004015,16,27	45125 Sierra Hwy	Commercial-Auto Sales	0.464
3134004025	45117 Sierra Hwy	Commercial-Auto Service	0.404
3134004026	45103 Sierra Hwy	Commercial-Auto Service	0.405
3133026036	44957 Elm Ave	SFR	0.344
3133026021	44947 Elm Ave	SFR	0.189
3133026020	44941 Elm Ave	SFR	0.100
3133026009	44931.1 Elm Ave	SFR	0.309
3133026046	NA	MFR	0.3
3133026045	NA	MFR	0.0
3133026047	NA	MFR	0.041
3133026019	716 Kettering St.	MFR	0.854
3133026029	NA	MFR	0.401
3133001017	866 Avenue I	Commercial	0.387
3133001018	45124 10th Street West	Commercial	4.172
3133001005	832 Avenue I	Commercial	0.418
3133001012	826.1 Avenue I	Commercial	0.368
3133001013	826.2 Avenue I	Commercial	0.276
3133001022	810 Avenue I	Commercial	0.287
3133001023	00000.1 Avenue I	Vacant-Commercial	0.356
3133001019	802 Avenue I	Commercial	0.262
3133001020	45181 Fern Ave	Commercial	0.282
3133001020	45167 Fern Ave	Commercial	0.22
3133001021	NA	Vacant-Commercial	5.36



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NA	45100	Fern Ave	MFR	2.997
NA	700	Avenue I	MFR	3.558
NA	777	Jackman	MFR (Senior Center)	3.591
NA	NA		MFR	4.344

Note: Multi-Family Residential (MFR), Single-Family Residential (SFR) Information Not Available at time of Assessment (NA).

## 3.2.1.4 City Directory Searches

City Directories, published by private companies (or sometimes the government), provide a chronological sequence of past site ownership, occupancy, and/or uses for a property by reference of an address. This type of search is particularly effective and primarily used to determine the past uses of commercial properties. However, due to the quantity of on-site properties, this Assessment has relied upon other standard historical information sources assumed to be either more accurate or informative than City Directory Searches.

## 3.2.1.5 Sanborn Fire Insurance Maps

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 searched the *Digital Sanborn Map Database* (provided by the Sanborn Map Company 2001), which contains Sanborn Maps for the State of California from 1867 through 1970.

Review of available Digital Sanborn Maps for the subject site vicinity, dated 1910 through 1934, indicated that on- and off-site land uses primarily consisted of residential dwellings. Approximately nine (9) properties were identified as gas stations or auto service centers within subject site and surrounding areas. However, due to the age, scale and quality of the digital maps, the exact location of the gas stations and auto centers remains undefined (refer to Appendix B, *Documentation*).

# 3.2.1.6 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 subject 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 W1-1, for the Los Angeles and Kern Counties, dated February 6, 1999, no existing/historical oil or gas wells are identified on or within the immediate vicinity of the subject site. Refer to Appendix B, *Documentation*, for a copy of Wildcat Map W1-1.

# 3.2.1.7 Regional Water Quality Control Board: File Review

RBF conducted a file review at the Regional Water Quality Control Board (RWQCB), Lahontan Region, on January 8, 2003 in an effort to examine the lateral extent of groundwater contamination from on-and off-site properties that have reported subsurface releases. The following is a discussion of site history and file review findings for selected properties listed within the Environmental Data Resources (EDR) Database Report. Selected copies of the reviewed files are contained in Appendix B, *Documentation*.



**610/630 West Avenue I (Former Everest Economy Gas):** 610/630 West Avenue I is located within the boundaries of the subject site; more specifically, the property is situated on the northern boundary of the subject site. This property has reported subsurface releases and is listed in the EDR Database Report for historically having three (3) underground storage tanks (USTs) onsite. According to the property's *Corrective Action Plan*, prepared by Environmental Assessment and Remediation Management, Inc., dated August 27, 2002, the site was occupied in the past by Mr. Wrench (auto repair) and a U-haul rental/storage facility.

In 1997, nine (9) steel, single-walled USTs were removed from the site. Associated piping and dispensers were also removed. Soil samples were conducted on-site and "significant concentrations of petroleum hydrocarbons" were found on-site. According to the report and laboratory results of soil samples collected, evidence supported the UST removal findings that point source releases probably occurred from the three (3) 10,000 gallon USTs.

After a second round of site assessments, it was concluded that the soil and groundwater beneath the property were impacted by petroleum hydrocarbons and the lateral extent may extend off of the property in a north-northwesterly direction (thus impacting additional on-site properties). Further subsurface investigation and the continuation of quarterly groundwater monitoring has been recommended. As of April 2002, groundwater impacts from petroleum hydrocarbons were observed in all of the monitoring wells during the sampling event. At the time of this Assessment, the lateral extent of contamination onsite due to 610 West Avenue I remains undefined. Therefore, the cause for a an environmental concern within the northern portion of the subject site is considered to be high.

- 44813 Yucca Avenue (Lancaster Moving & Storage): Pursuant to the January 8, 2003 file review at the RWQCB, 44813 Yucca Avenue has been reported closed/completed on April 24, 1990.
- 45218 Sierra Highway (Former Chevron Bulk Fuel Facility 100-1488): 45218 Sierra Highway is located less than ¼-mile from the subject site's northeastern boundary. According to a Site Assessment Prepared by Harding ESE, dated October 9, 2002, the former Chevron Bulk Fuel Facility is currently vacant and unpaved with no existing tanks or structures. The facility previously operated aboveground storage tanks (ASTs) containing gasoline, aviation fuel, diesel fuel, kerosene, and lubricating oil. According to past reports, petroleum hydrocarbon concentrations present in the soil do not pose a significant threat to groundwater resources. Due to the "rate at which diesel-range petroleum hydrocarbons migrate to the shallow groundwater is low, natural processes will continue to maintain diesel-range petroleum hydrocarbon concentrations below current analytical laboratory method detection limits". Since "no significant risk to human health" is reported within 45128 Sierra Highway, the potential for an environmental condition within the subject site due to prior releases at 45128 Sierra Highway appears to be low.
- ♦ 44949 10<sup>th</sup> Street West (Monte Vista Alta-Dena Dairy): 44949 10<sup>th</sup> Street West is located approximately ¼-mile southwest of the subject site. The site is reported to be occupied by Monte Vista Alta-Dena Dairy and is utilized as a drive through convenience store. The site was originally developed in 1967



and has been previously used as a gas station and drive through store from approximately 30 years. Two (2) 12,000-gallon gasoline USTs were removed from the property in 1997. Due to reported subsurface releases, soil samples were taken from the property from approximately 20 to 50 feet below ground surface(bgs). Findings from the soil samples indicate that contamination is concentrated around the immediate vicinity of the former tanks. However, the lateral distribution of detectable concentrations of contaminants extends west to 11<sup>th</sup> Street, north to Jackman Street, east to 10<sup>th</sup> Street West and south to surrounding adjacent properties.

Monitoring wells along 10<sup>th</sup> Street had reported concentrations slightly above the RWQCB's Maximum Contaminant Levels for drinking water (MCLs). Proposed impacts and improvement to 10<sup>th</sup> Street (within the vicinity of the subject site) are anticipated to be a component of the proposed revitalization project. Due to positive findings of contamination, a potential for an environmental concern is located within the subject site's southwestern border and a long 10<sup>th</sup> Street.

918 Lancaster Boulevard (ARCO Service Station): 918 Lancaster Boulevard is located less than ¼-mile to the south of the subject site. According to a letter by the RWQCB, dated October 24, 2002, petroleum products released at the ARCO Service Station #3030 have polluted soil and groundwater beneath the property. The contaminated groundwater is reported to be present approximately 45 feet bgs. Groundwater impacts within the abovementioned property do not appear to have migrated within the boundaries of the subject site; therefore, the cause for an on-site environmental concern due to 918 Lancaster Boulevard appears to be low.

# 3.2.1.8 Historical Topographic Maps

RBF reviewed historical topographic maps dated 1958 through 1974, for the subject 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 presented in Appendix B, *Documentation*.

- 1958: In the 1958 USGS Lancaster West, California Quadrangle, on-site land uses consist of mixed land uses. The subject site appears to be "urbanized" and located on relatively level topography. The Southern Pacific Railroad (SPRR) and Sierra Highway are visible immediately east of the subject site. Avenue I, Lancaster Boulevard and 10<sup>th</sup> Street West are present as well as numerous local streets within the subject site boundaries. Monte Vista School is visible to the east of the subject site. Several structures are present within the subject site and surrounding areas, most notably to the north of Avenue I. The Amargosa Creek is located northwest of the subject site. No pits, ponds, or lagoons, were noted on the 1958 topographic map.
- 1974: In the 1974 USGS Lancaster West, California Quadrangle, on-site topography is similar to the 1958 topographic map. State Route 14 (SR-14) is now visible to the west of the subject site. Additional structures (primarily labeled as churches) are present within the subject site and surrounding area. Continued development has occurred within the surrounding area. Increased



development is noted to the southwest of the subject site via photo revisions. No pits, ponds, or lagoons, were noted on the 1974 topographic map.

Based on review of the above referenced historical topographic maps, the subject site appears to have consisted of mixed land uses within an urbanized area. No evidence to support the existence of a recognized environmental condition on-site was visible during the review of topographical maps.

**3.1.3 Aerial Photographs** RBF reviewed available aerial photographs for the subject 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 1953 through 1994 provided the following chronological sequence of site history. The aerial photographs were provided by Environmental Data Resources, Inc., and are listed in Section 6.0, *References.* Copies of these historical aerial photographs are presented in Appendix B, *Documentation*.

- 1953: In the 1953 aerial photograph, the subject site consists of mixed land uses including residential, commercial and vacant land. Numerous structures are visible within the eastern portion of the subject site and appear to be associated with residential uses. Limited structures are present within the western portion of the site; however, this area is primarily dominated by vacant land. Surrounding land uses appear to consists of mixed land uses similar to those noted within the subject site. Vacant land is visible to the north of the subject site. Commercial and residential structures are visible immediately north, south, east and west of the subject site. However, it should be noted that commercial/industrial uses appear to be concentrated to the east. Sierra Highway and the Southern Pacific Railroad (SPRR) are present immediately east of the subject site. Numerous roadways are visible within the subject site and throughout the surrounding area including Avenue I, Lancaster Boulevard, and 10<sup>th</sup> Street West.
- 1968: In the 1968 aerial photograph, on-site uses appear to be similar to those viewed in the 1953 aerial photograph. However, the majority of the on-site vacant lots have been developed. The subject site continues to be dominated by residential land uses. It appears that structures that adjoin Avenue I, Sierra Highway, Lancaster Boulevard, and 10<sup>th</sup> Street West are commercial/light industrial in nature. Off-site land uses continue to primarily consist of mixed land uses. However, numerous additional structures are now present to the north, south, east and west of the subject site. Increased development appears present within the entire vicinity of the subject site.
- 1989: In the 1989 aerial photograph, on-site uses appear to be similar to those of present day. Multi- and single-family housing is noted throughout the subject site; large scale senior housing is also noted near the central portion of the project site. Vacant land continues to exist on-site; however, vacant areas a now limited to the western and eastern boundaries. Surrounding off-site uses are similar to those noted in the 1968 aerial photograph.
- 1994: In the 1994 aerial photograph, on- and off-site uses appear to be similar to those viewed in the 1989 aerial photograph. The subject site consists of mixed uses typical of an urbanized environment.



Based on review of the above referenced historical aerial photographs, the subject site appears to have consisted of mixed land uses. No evidence to support the existence of a recognized environmental condition on-site was visible during the review of available historical aerial photographs.

#### 3.1.4 Other Historical Sources

Other historical sources include miscellaneous maps, newspaper archives, and records in the files and/or personal knowledge of the property owner and/or occupants. No other historical sources beyond those previously identified within this Assessment were utilized during the historical investigation.

# 3.2 REGULATORY SOURCES

The governmental sources have been searched by Environmental Data Resources, Inc. (EDR) (at the request of RBF), for sites within the project site boundaries and within an approximate one-mile radius of the subject property boundaries. Upon completion of their search, EDR provided RBF with their findings dated November 22, 2002 (refer to Appendix A, EDR *Search*). 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 on the subject property 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. The following federal and state records searched are presented below preceded by a description of the purpose of each database:

#### **J.2.1 Federal Sources**

#### Federal ASTM Records:

**National Priorities List (NPL):** The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the U.S. EPA in order to become an NPL site.

**RCRA Corrective Action Report (CORRACTS):** The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predated RCRA.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS/NFRAP): The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS/NFRAP) database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated or are currently under investigation by the EPA for release or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation and ultimately placed on the National Priorities List (NPL).

**RCRA Permitted Treatment, Storage, Disposal Facilities (RCRA-TSD):** The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous



waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

**RCRA Registered Small or Large Generators of Hazardous Waste (GNRTR):** The RCRA Large and Small quantity Generators database is a compilation by the EPA of facilities, which report generation, storage, transportation, treatment of disposal of hazardous waste.

**Toxic Release Inventory System (TRIS):** All facilities that manufacture, process, or import toxic chemicals in quantities in excess of 25,000 pounds per year are required to register with the EPA under Section 313 of the Superfund Amendments and Reauthorization Act (SARA Title III) of 1986. Data contained in the TRIS system covers approximately 20,000 sites and 75,000 chemicals releases.

#### 3.2.2 State Sources State of California ASTM Records:

State CERCLIS (SCL): This database is provided by the Department of Toxic Substances Control to evaluate and track activities at sites that may have been affected by the release of hazardous substances.

**State Equivalent Priority List (SPL):** This database is provided by the California Environmental Protection Agency, Department of Toxic Substances Control.

**Leaking Underground Storage Tanks (LUST):** This database is provided by the California Environmental Protection Agency.

Solid Waste Landfill List (SWLF): This database is provided by the California Solid Waste Information System (SWIS) and consists of both open as well as closed inactive solid waste disposal facilities and transfer station pursuant to the Solid Waste Management and Resource Recovery Act of 1972.

**Registered Underground or Aboveground Storage Tank Database (UST/AST):** This database is provided by the State Water Resources Control Board, Office of Underground Storage Tanks.

**ERNS and State Lists (SPILLS):** This database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center and the Department of Transportation.

## 3.2.3 Standard Environmental Record Searches

3.2.3.1 Subject Site Thirty-four (34) listed regulatory sites are located within the boundaries of the subject site which are listed in one or more of the above identified databases. For a complete list of sites identified and their status, refer to the map of sites within a one-mile radius of the subject site contained within Appendix A, *EDR Search*. Table 3, *Identified Regulatory Sites Within a ½-Mile of the Subject Site*, below, indicates the listed regulatory sites located within a ½-mile radius of the subject site.

#### 3.2.3.2 All Regulatory Listed Sites Within a One-mile Radius of the Subject Site

Surrounding properties listed in the EDR Database Report that are located within a half mile were reviewed to determine whether groundwater contamination or other unauthorized releases has occurred which could potentially affect surface or subsurface conditions of the subject site. For unauthorized releases (typically related to leaking USTs



that have impacted groundwater) a ¼- mile radius is used. Typically, contamination plumes within groundwater are relatively localized to the source. Topographic conditions generally dictate the movement of groundwater thus the surface gradient is used to determine whether contamination plumes could be moving towards the subject site. The likelihood of groundwater contamination traveling a quarter of a mile or more from a source is extremely limited, therefore, this distance is used as a benchmark for determining the potential for off-site contamination.

Sixty-one (61) listed regulatory sites are located within a half-mile radius of the subject site which are listed in one or more of the above identified databases. For a complete list of sites identified and their status, refer to the map of sites within a one-mile radius of the subject site contained within Appendix A, *EDR Search*. Table 3, *Identified Regulatory Sites Within a ½-Mile of the Subject Site*, below, indicates the listed regulatory sites located within a ½-mile radius of the subject site.

## 3.2.4 Additional Environmental Record Searches

No additional environmental records searches were performed during the preparation of this Assessment.

Table 3 IDENTIFIED SITES WITHIN A ½-MILE RADIUS OF THE SUBJECT SITE (Were Identified in the Regulatory Database)

EDR Map ID#	Site Name/Address	Direction from Subject Site	Regulatory UST	Site Status	Potential for an Environmental Condition on the Subject Site
4	Gorrindo Texaco 44339 Sierra Highway North	0.15-miles north of the subject site	LUST CORTESE HAZNET	Ground water affected. Remedial action underway (VES System). Tank bottom waste reported on-site. <b>Disposal Method:</b> <b>Recycler</b> .	Low (Site located ¼-mile down gradient of the subject site)
4	Henry Walsma 44354 Sierra Highway North	0.15-miles north of the subject site	LUST CORTESE	Contamination limited to soil only. Signed off.	Low (Refer to site status)
5	Precision Cylinder Head 45255 Trevor Street	0.20-miles northeast of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)
5	Petro Lock Inc 45315 Trevor Street	0.20-miles northeast of the subject site	UST HIST UST RCRIS-SQG FINDS HAZNET LUST CA FID UST LA CO HMS	Handler transports waste, Small Quantity Generator. Two (2) violation records reported. One (1) LUST reported on-site. Preliminary Site Assessment Workplan submitted. One (1) UST reported on-site. No violations reported. Twelve (12) historical USTs reported on-site.	Low (Site located ¼-mile down gradient of the subject site)



5	Knight Engineering 45322 North Trevor Avenue	0.20-miles northeast of the subject site	HAZNET	Photochemicals reported on-site. <b>Disposal</b> <b>Method: Recycler.</b>	Low (No contamination reported)
6	L&M Auto Bodies/Reid's Sierra Auto Body 45116 North Yucca Street	0.15-miles northeast of subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator. No violations found. Oxygenated solvents, organic solids and unspecified solvent mixture reported on-site. <b>Disposal Method:</b> <b>Treatment,</b> <b>Incineration, Transfer</b> <b>Station, Recycler.</b>	Low (No contamination reported)
7	Desert Body Works 420 West Avenue I	0.05-miles east of the subject site	RCRIS-SQG FINDS HAZNET LA CO HMS	Small Quantity Generator. No violations found. Unspecified solvent mixture reported on-site. <b>Disposal</b> <b>Method: Recycler.</b>	Low (No contamination reported)
7	Bob Howle Auto 226 West Avenue I	0.05-miles east of the subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator. No violations found. Unspecified organic liquid and aqueous solution reported on-site. Disposal Method: Recycler.	Low (No contamination reported)
7	Little Mini Mart #103 310 West Avenue I	0.05-miles east of the subject site	UST	One (1) UST reported on- site. No violations reported.	Low (No contamination reported)
7	AV Auto Paints 4 MH Inc DBA & Supplies 339 West Avenue I	0.05-miles east of the subject site	HAZNET	Unspecified solvent mixture reported on-site. Disposal Method: Recycler.	Low (No contamination reported)
7	AV Auto Clinic 359 West Avenue I	0.05-miles east of the subject site	HAZNET	Unspecified solvent mixture and aqueous solution reported on-site. Disposal Method: Transfer Station, Recycler.	Low (No contamination reported)
7	AV Engines 383 West Avenue I	0.05-miles east of the subject site	HAZNET	Oil/water separation sludge reported on-site. Disposal Method: Not Reported.	Low (No contamination reported)
7	AV Kawasaki-Yamaha 400 West Avenue I	0.05-miles east of the subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator. No violations found. Laboratory waste chemicals reported on- site. Disposal Method: Not reported.	Low (No contamination reported)
7	Brashear Body & Fender Shop 202 West Avenue I	0.05-miles east of the subject site	LA CO HMS	Facility status: open	Low (No contamination reported)
7	ABC Radiator Service/L&S Automotive 528 West Avenue I	0.05-miles east of the subject site	HIST UST HAZNET	One (1) UST reported on-site. No violations reported. Aqueous solution reported on- site. <b>Disposal Method:</b> <b>Recycler.</b>	Low (No contamination reported)



7	Kens Service Center 359 West Avenue I	0.05-miles east of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)
7	Bennett Frame Align 45223 North Trevor Avenue	0.05-miles east of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)
7	Form Chevron Facility #1001488 45218 Sierra Highway Avenue I	0.05-miles east of the subject site	LUST	Ground water affected. Remedial action underway. Levels of contamination "insignificant" and below "detection limits". Refer to <i>Section 3.2.1.7</i> for further discussion.	Low (Refer to site status)
7	AV Auto Body & Truck 45231 North Trevor Avenue	0.05-miles east of the subject site	HAZNET	Organic solids and solvent mixture reported on-site. <b>Disposal</b> <b>Method: Recycler</b> <b>Treatment,</b> <b>Incineration, Transfer</b> <b>Station.</b>	Low (No contamination reported)
7	Vics Bimmer Shop 45253 North Trevor Avenue	0.05-miles east of the subject site	HAZNET	Organic liquid mixture reported on-site. <b>Disposal Method:</b> <b>Recycler.</b>	Low (No contamination reported)
7	Drake Automotive 45255 North Trevor Avenue	0.05-miles east of the subject site	HAZNET	Waste oil and unspecified aqueous solutions reported on-site. <b>Disposal Method:</b> <b>Recycler</b> .	Low (No contamination reported)
8	Antelope Valley Fairground 1551	0.40-miles north east of the subject site	CORTESE	No further information reported.	Low (No contamination reported; site located > ¼-mile)
9	GTE California Incorporated 45243 North Beech	Located within the boundaries of the subject site	HAZNET UST	Aqueous solution, hydrocarbon solvents and oil/water separation sludge reported on-site. <b>Disposal Method:</b> <b>Recycler, Transfer</b> <b>Station</b> . One (1) UST reported on-site. No violations reported.	Medium (USTs located on-site, potential "material threat"; however, no contamination reported)
9	Jims Auto Service 45234 North Beech Avenue	Located within the boundaries of the subject site	LA CO HMS	Facility closed.	Low (No contamination reported)
9	Lancaster Imports 45234 Beech Avenue	Located within the boundaries of the subject site	RCRIS-SQG FINDS HIST UST	Small Quantity Generator reported on- site. No violations found. Three (3) historical USTs reported on-site.	Medium (USTs historically located on-site, potential "material threat"; however, no contamination reported)
9	Verizon California 45243 North Beech Avenue	Located within the boundaries of the subject site	RCRIS-SQG FINDS LA CO HMS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)
9	Transmission Specialties 555 W Avenue I	Located within the boundaries of the subject site	HAZNET	Unspecified oil- containing waste reported on-site. Disposal Method: Recycler.	Low (No contamination reported)



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9	Alisa & Segio Blanco 610 West Avenue I	Located within the boundaries of the subject site	HAZNET	Waste oil and mixed oil reported on-site. Disposal Method: Recycler.	Low (No contamination reported)
9	Vons Brake Service 555 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)
9	Gill & Sons Inc Everest Econo 610 West Avenue I	Located within the boundaries of the subject site	LUST CORTESE HIST UST	Ground water affected. Remediation plan underway. Three (3) historical USTs reported on-site.	High (Contamination impacts significant. Refer to <i>Section 3.2.1.7</i> for detailed discussion)
9	Pacific Tire Service/Winston Tire Company 622 West Avenue I	Located within the boundaries of the subject site	SWF/LF HAZNET	Waste tire site. Aqueous solutions an oil-containing waste reported on-site. <b>Disposal Method:</b> <b>Transfer Station,</b> <b>Recycler.</b>	Low (No contamination reported)
9	Mission Uniform and Linen Service 619 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS CA FID UST LA CO HMS HIST UST	Small Quantity Generator reported on- site. No violations found. One (1) UST reported on-site. No violations reported. Two (2) historical USTs reported on-site.	Medium (USTs located on-site, potential "material threat"; however, no contamination reported)
9	Vics Bimmer Shop 555 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator reported on- site. No violations found. Aqueous solutions reported on- site. <b>Disposal Method:</b> <b>Recycler.</b>	Low (No contamination reported)
9	Aamco Transmission 555 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)
10	Lancaster Shell 866 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS LA CO HMS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)
10	Mike Kash Auto Tech 1004 West Avenue I	Located within the boundaries of the subject site	HAZNET	Aqueous solutions reported on-site. Disposal Method: Transfer Station Recycler Transfer Station Treatment	Low (No contamination reported)
10	AV Smog Station 1007 West Avenue I	Located within the boundaries of the subject site	HIST UST CA FID UST	Three (3) historical UST and one (1) UST reported on-site. No violations reported.	Medium (USTs located on-site, potential "material threat"; however, no contamination reported)



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10	Butler Oil Company 1007 West Avenue I	Located within the boundaries of the subject site	HAZNET	Aqueous solutions reported on-site. Disposal Method: Recycler	Low (No contamination reported)
10	Alliance Service Station 1007 West Avenue I	Located within the boundaries of the subject site	UST	One (1) UST reported on-site. No violations found.	Medium (UST located on-site, potential "material threat"; however, no contamination reported)
11	Lancaster Jiffy Lube 45181 North Fern Avenue	Located within the boundaries of the subject site	AST HAZNET LA CO HMS RCRIS-SQG FINDS	Small Quantity Generator. No violations found. Waste oil and mixed oil and aqueous solution reported on- site. Disposal Method: Transfer Station, Recycler.	Low (No contamination reported)
11	Swans Trailer Park 723 West Avenue I	Located within the boundaries of the subject site	LA CO HMS	Facility closed	Low (No contamination reported, refer to site status)
11	Chief Auto Parts #13911 845 West Avenue I	Located within the boundaries of the subject site	HAZNET	Organic solids reported on-site. <b>Disposal</b> <b>Method: Recycler</b> .	Low (No contamination reported)
11	Shell Oil Co/LACOSSE/SEEGER 866 West Avenue I	Located within the boundaries of the subject site	LA CO HMS UST HIST UST	One (1) UST reported on-site. Five (5) historical USTs reported on-site. No violations found. Facility closed.	Medium (UST located on-site, potential "material threat"; however, no contamination reported)
11	Mobil #11-MM8 861 West Avenue I	Located within the boundaries of the subject site	LUST HIST UST HAZNET RCRIS-SQG FINDS	Ground water affected. Cased closed, signed off. Small Quantity Generator. No violations found. Four (4) historical USTs reported on-site. Aqueous solutions reported on- site. <b>Disposal Method:</b> <b>Treatment, Tank</b> <b>Recycler</b> .	Medium (USTs historically located on-site, potential "material threat"; however, no contamination reported)
12	F&G Tractor Sales 666 West Avenue I	Located within the boundaries of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)
12	AV Auto Electric 650 West Avenue I	Located within the boundaries of the subject site	LA CO HMS	Facility closed.	Low (No contamination reported, refer to site status)
12	Sears Veterinary Clinic 565 West Avenue I	Located within the boundaries of the subject site	LA CO HMS	Facility closed.	Low (No contamination reported, refer to site status)



709 West Avenue I         the boundaries of the subject site         HAZNET         reported oviolations Waste oil an reported Disposal Recy           13         White's Arco 310 West Avenue I         0.25-miles east of the subject site         HIST UST         Three (3) USTs report           15         Carosel Dry Cleaners 1215 West Avenue I         0.20-miles west of the subject site         RCRIS-SQG FINDS HAZNET CLEANERS         Small Q Generator. N found. Hai solvents re site. Dispos rester           16         Chevron #9-5509 104 West Avenue I         0.40-miles east of the subject site         LUST         Contaminatic solid contaminati								
310 West Avenue I     the subject site     USTs report       15     Carosel Dry Cleaners 1215 West Avenue I     0.20-miles west of the subject site     RCRIS-SOG FINDS HAZNET CLEANERS     Small Q Generator. N round. Hall solvents re- site. Dispos Recycler, stati       16     Chevron #9-5509 104 West Avenue I     0.40-miles east of the subject site     LUST     Contaminatic soli only. C off/clo       17     UES Universal Electric Supply 667 West Avenue I     Located within the boundaries of the subject site     LA CO HMS     Facility i Soli only. C       18     Waynes Place 45101 Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Sierra Automotive and Towing 45134 North Trevor     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Pickus RPR SVC 45137 North Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Pickus RPR SVC 45137 North Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       19     Lancaster Grocery Outlet 45124 North 10° Street West     Located within the boundaries of the subject site     HAZNET     Polychio Site. Dispos	-site. No (No contamination reported) eported. d mixed oil on-site. <b>lethod:</b>	One (1) historical USTs reported on-site. No violations reported. Waste oil and mixed oil reported on-site. <b>Disposal Method:</b> <b>Recycler</b> .		the boundaries of		12		
1215 West Avenue I     of the subject site     FINDS HAZNET CLEANERS     Generator. N found. Hal solvents re- site. Disposi Recycler, stati       16     Chevron #9-5509 104 West Avenue I     0.40-miles east of the subject site     LUST     Contaminatic soli only. C off/clo       17     UES Universal Electric Supply 667 West Avenue I     Located within the boundaries of the subject site     LA CO HMS     Facility ( Soli only. C off/clo       18     Waynes Place 45101 Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Sierra Automotive and Towing 45134 North Trevor     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Pickus RPR SVC 45137 North Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       18     Pickus RPR SVC 45137 North Trevor Avenue     0.15-miles east of the subject site     RCRIS-SQG FINDS     Small Q Gener No violation       19     Lancaster Grocery Outlet 45124 North Trevor Avenue     Located within the boundaries of the subject site     HAZNET     Polychio biphernys re site. Dispos		Three (3) historical USTs reported on-site.	HIST UST			13		
104 West Avenue I       the subject site       soil only. C         17       UES Universal Electric Supply 667 West Avenue I       Located within the boundaries of the subject site       LA CO HMS       Facility of Facility of Facility of the subject site         18       Waynes Place 45101 Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Sierra Automotive and Towing 45134 North Trevor       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Sierra Automotive and Towing 45137 North Trevor       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Pickus RPR SVC 45137 North Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         19       Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street West       Located within the boundaries of the subject site       HAZNET       Polychlo biphenyls re site. Dispos	o violations (No contamination reported) ogenated orted on- I Method: Transfer	Small Quantity Generator. No violations found. Halogenated solvents reported on- site. Disposal Method: Recycler, Transfer station.	FINDS HAZNET			15		
18       Waynes Place 45101 Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Sierra Automotive and Towing 45134 North Trevor       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Sierra Automotive and Towing 45134 North Trevor       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Pickus RPR SVC 45137 North Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         18       Pickus RPR SVC 45137 North Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS       Small Q Gener No violation         19       Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street West       Located within the boundaries of the subject site       HAZNET       Polychlo biphenyls re site. Disposi	se signed (Refer to site status)	Contamination limited to soil only. Case signed off/closed.	LUST			16		
45101 Trevor Avenue       the subject site       FINDS       Gener No violation         18       Sierra Automotive and Towing 45134 North Trevor       0.15-miles east of the subject site       RCRIS-SQG FINDS HAZNET       Small Q Gener No violation         18       Pickus RPR SVC 45137 North Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS HAZNET       Small Q Gener No violation         18       Pickus RPR SVC 45137 North Trevor Avenue       0.15-miles east of the subject site       RCRIS-SQG FINDS HAZNET       Small Q Gener No violation         19       Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street West       Located within the boundaries of the subject site       HAZNET       Polychlo         19       Lancaster Grocery Outlet       Located within the boundaries of the subject site       HAZNET       Polychlo	losed. Low (No contamination reported, refer to site status)	Facility closed.	LA CO HMS	the boundaries of		17		
45134 North Trevorthe subject siteFINDS HAZNETGener No violation Aqueous so waste oil re site. Dispos Recyc18Pickus RPR SVC 45137 North Trevor Avenue0.15-miles east of the subject siteRCRIS-SQG FINDSSmall Q Gener No violation Recyc19Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street WestLocated within the boundaries of the subject siteHAZNETPolychlo biphenyls re site. Dispos	ator. (No contamination reported)	Small Quantity Generator. No violations found.				18		
45137 North Trevor Avenue     the subject site     FINDS     Gener No violation       19     Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street West     Located within the boundaries of the subject site     HAZNET     Polychlo biphenyls re site. Disposition	ator. (No contamination reported) s found. utions and ported on- I Method:	Small Quantity Generator. No violations found. Aqueous solutions and waste oil reported on- site. <b>Disposal Method:</b> <b>Recycler.</b>	FINDS			18		
45124 North 10 <sup>th</sup> Street West the boundaries of the subject site site. <b>Dispos</b>	ator. (No contamination reported)	Small Quantity Generator. No violations found.				18		
	orted on- I Method: (PCB on-site, refer to site status)	Polychlorinated biphenyls reported on- site. <b>Disposal Method:</b> <b>Recylcer.</b>	HAZNET	the boundaries of	Lancaster Grocery Outlet 45124 North 10 <sup>th</sup> Street West	19		



20	Teds Porsche Audi and VW 45003 Yucca	0.10-miles east of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)		
20	RG Automotive & Mobil Svc 45005 Yucca Avenue	0.10-miles east of the subject site	RCRIS-SQG FINDS	Small Quantity Generator. No violations found.	Low (No contamination reported)		
20	MJ the Motorcycle Shop 45009 Yucca Avenue	0.10-miles east of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)		
21	Precision Automotive 45117 Sierra highway Suite 2	Located within the boundaries of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)		
22	Sparkletts Drinking Water Corp 45035 Trevor Avenue	0.15-miles east of the subject site	HIST UST	One (1) historical UST reported on-site. No violations found.	Low (No contamination reported)		
22	Calcol Inc DBA California Collison Ctr 45050 Trevor Avenue	0.15-miles east of the subject site	HAZNET	Aqueous solutions and organic solids reported on-site. <b>Disposal</b> <b>Method: Recycler.</b>	Low (No contamination reported)		
22	The Moving Connection 45059 North Trevor Avenue	0.15-miles east of the subject site	HAZNET	Oil-containing waste and waste oil reported on-site. <b>Disposal</b> <b>Method: Recycler.</b>	Low (No contamination reported)		
23	Lancaster Substation 45053 North Fern Avenue	Located within the boundaries of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)		



23	So Cal Edison Lancaster Substation 45053 North Fern Avenue	Located within the boundaries of the subject site	HAZNET	Waste oil, solvent mixture and solids or sludges with halogenated organic compounds reported on-site. <b>Disposal</b> <b>Method: Recycler,</b> <b>Transfer Station.</b>	Low (No contamination reported)
24	Mission Industries 44926 Yucca Avenue	0.10-miles east of the subject site	LUST CORTESE CA FID UST LA CO HMS HIST UST	LUST case signed off. One (1) active UST reported on-site. No violations found. Two (2) historical USTs reported on-site.	Medium (USTs located on-site, potential "material threat"; however, no contamination reported)
24	Desert Industrial Supply 44929 Yucca Avenue	0.10-miles east of the subject site	HIST UST	One (1) historical UST reported on-site. No violations found.	Low (No contamination reported)
25	Pioneer Edsel Sales 45005 North Sierra Highway	0.05-miles south of the subject site	RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found.	Low (No contamination reported)
26	City of Lancaster City Yard/Southern California Edison Co 45013 North Fern Avenue	Located within the boundaries of the subject site	CA FID UST LA CO HMS HIST UST	Facility removed or closed. One (1) historical UST reported on-site. No violations found.	Medium (UST historically located on-site, potential "material threat"; however, no contamination reported)
27	Monte Vista Alta Dena Dairy/Hyung Jim Kim/Frank A Lane 44949 North 10 <sup>th</sup> Street West	0.05-miles south of the subject site	LUST CORTESE LA CO HMS HIST UST HAZNET	Ground water affected. Remediation plan underway. Two (2) historical USTs reported on-site. Waste oil and organic liquids reported on-site. <b>Disposal</b> <b>Method: Transfer</b> <b>Station, Recycler.</b>	Medium (Groundwater affected on- site; refer to <i>Section</i> <i>3.2.1.7</i> )
27	Great Chiropractic 44967 North 10 <sup>th</sup> Street West	0.05-miles south of the subject site	HAZNET	Photo chemicals and metal sludge reported on-site. <b>Disposal</b> <b>Method: Treatment,</b> <b>Incineration, Recycler.</b>	Low (No contamination reported)
28	Uno Veterinary Corporation 44848 North Yucca Avenue	0.15-miles southeast of the subject site	HAZNET	Metal sludge reported on-site. <b>Disposal</b> Method: Recycler.	Low (No contamination reported)
29	City of Lancaster 44933 Fern Avenue	Located within the boundaries of the subject site	UST	One (1) UST reported on-site.	Medium (UST located on-site, potential "material threat"; however, no contamination reported)
29	Genl Telephone Co 44944 Fern Avenue	Located within the boundaries of the subject site	LA CO HMS	No further information reported.	Low (No contamination reported)
29	GTE Switch RM 762 West Kettering Street	Located within the boundaries of the subject site	HAZNET FINDS UST HIST UST	One (1) UST reported on-site. One (1) historical UST reported on-site. No violations found. Tank bottom waste reported on-site. <b>Disposal Method:</b> <b>Recycler</b> .	Medium (UST located on-site, potential "material threat"; however, no contamination reported)



30	Lancaster Moving and Storage 44813 Yucca Avenue	0.20-miles southeast of the subject site	LUST CORTESE	Site closed April 24, 1990.	Low (Refer to site status)
30	Desert Moving and Storage Co 44814 Yucca Avenue	0.20-miles southeast of the subject site	HIST UST	One (1) historical UST reported on-site. No violations found.	Low (No contamination reported)
31	Morgan Attwood & Son, Inc 843 West Kildare	0.10-miles southwest of the subject site	HAZNET RCRIS-SQG FINDS	Small Quantity Generator reported on- site. No violations found. Unspecified organic liquid mixture and oil/water separation sludge reported on-site. <b>Disposal Method:</b> <b>Transfer Station.</b>	Low (No contamination reported)
32	LA CO Sheriff Lancaster Station/Johnson Controls Lancaster Station 501 West Lancaster Blvd	0.15-miles southeast of the subject site	HAZNET UST	One (1) UST reported on-site. No violations found. Asbestos- containing waste, tank bottom sludge, inorganics, waste oil and aqueous solutions reported on-site. <b>Disposal Method:</b> Land Fill, Transfer Station, Recycler.	Low (No contamination reported)
33	Bank of America 749 West Lancaster Blvd	0.05-miles south of the subject site	HAZNET	Organic liquids with metals reported on-site. <b>Disposal Method:</b> <b>Transfer Station</b> .	Low (No contamination reported)
34	Antelope Auto Spec 44824 10 <sup>th</sup> Street West	0.20-miles southwest of the subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator reported on- site. No violations found. Unspecified oil- containing waste reported on-site. <b>Disposal Method:</b> <b>Recycler.</b>	Low (No contamination reported)
34	Fashion Dry Cleaner 44839 North 10 <sup>th</sup> Street West	0.20-miles southwest of the subject site	RCRIS-SQG FINDS HAZNET CLEANERS	Small Quantity Generator reported on- site. No violations found. Halogenated solvents reported on- site. <b>Disposal Method:</b> <b>Recycler</b> .	Low (No contamination reported)
34	Callas Brothers/J&J Markets 44854 North 10 <sup>th</sup> Street	0.20-miles southwest of the subject site	LUST CORTESE HIST UST	Contamination limited to soil. Signed off. Three (3) historical USTs reported on-site.	Low (Refer to site status)
34	Ruel W Bench DDS Inc 44855 North 10 <sup>th</sup> Street	0.20-miles southwest of the subject site	HAZNET	Photo chemicals reported on-site. Disposal Method: Transfer Station, Recycler.	Low (No contamination reported)
34	Andrews/Newman X Ray Lab 44861 North 10 <sup>th</sup> Street	0.20-miles southwest of the subject site	HAZNET	Inorganic solid waste and metal sludge reported on-site. <b>Disposal Method:</b> <b>Recycler.</b>	Low (No contamination reported)



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35	Arco Products 918 West Lancaster Blvd	0.15-miles southwest of the subject site	UST CA FID UST LA CO HMS HIST UST HAZNET LUST CORTESE	Ground water affected. Remedial action underway. One (1) active UST reported on- site. Five (5) historical USTs reported on-site. Aqueous solutions and hydrocarbon solvents reported on-site. Migration of groundwater appears to be south of Lancaster Boulevard. <b>Disposal</b> <b>Method: Recycler.</b>	Low (Refer to site status)
35	Valley Tumor Medical Group Inc 867 West Lancaster Blvd	0.15-miles southwest of the subject site	RCRIS-SQG FINDS HAZNET	Small Quantity Generator reported on- site. No violations found. Metal sludge reported on-site. <b>Disposal Method:</b> <b>Treatment,</b> <b>Incineration</b> .	Low (No contamination reported)
36	Gerald Bjalk 44820 Fern Avenue	0.10-miles southwest of the subject site	HAZNET	Unspecified organic liquid mixture reported on-site. <b>Disposal</b> <b>Method: Recycler</b> .	Low (No contamination reported)
37	Antelope Valley Bus Inc 44706 Yucca Avenue N	0.35-miles southeast of the subject site	LUST CORTESE	Contamination limited to soil only. Case closed, signed off.	Low (Refer to site status)
38	Los Angeles County Fire Dept Station #33 44806 North Cedar Avenue	0.25-miles south of the subject site	HIST UST HAZNET LA CO HMS	Two (2) historical USTs reported on-site. No violations found. Unspecified aqueous solution and waste oil reported on-site. <b>Disposal Method:</b> <b>Recycler</b> .	Low (No contamination reported)
39	Lancaster Chiropractic 720 West Milling Street	0.15-miles south of the subject site	HAZNET	Metal sludge reported on-site. Disposal Method: Treatment, Incineration.	Low (No contamination reported)
39	Milos Antic Family Dentistry 44810 North Elm Avenue	0.15-miles south of the subject site	HAZNET	Other inorganic solid waste reported on-site. Disposal Method: Transfer Station.	Low (No contamination reported)
40	Massari and Ford Chiropractic 44815 North Fig Ste H	0.15-miles south of the subject site	HAZNET	Metal sludge reported on-site. <b>Disposal</b> <b>Method: Recycler</b> .	Low (No contamination reported)
41	7-Eleven Store #17837 44011 Sierra Highway	0.50-miles south of the subject site	LUST CORTESE HIST UST	Contamination limited to soil only. Case closed/signed off. Two (2) historical USTs reported on-site.	Low (Refer to site status)





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	41	Caltrans Lancaster 44023 Sierra Highway	0.50-miles south of the subject site	LUST CORTESE	Contamination limited to soil only. Case closed/signed off.	Low (Refer to site status)
ш					ciosed/signed off.	

otes: Map ID numbers match the site numbers indicated on the map of sites within One-mile radius contained within Appendix A, EDR SEARCH.

#### POTENTIAL FOR ENVIRONMENTAL CONDITION KEY:

Low Potential = Potential to create environmental condition on subject site is considered to be low for one or several factors including, but not limited to, the following:

direction of groundwater flow is away from the subject site (down gradient); remedial action is underway or completed at off-site location; distance from subject site is considered great enough to not allow the creation of a potential environment condition; only soil was affected by the occurrence; and/ or reporting agency has determined no further action is necessary.

<u>Moderate Potential</u> = Potential to create environmental condition on subject site is considered to be moderate and further investigation may be necessary due to one or several factors including, but not limited to, the following:

occurrence reported but remedial status unknown; unable to confirm remedial action completed; proximity to subject site; groundwater flow is towards the subject site (up gradient).

High Potential = Potential to create environmental condition on subject site is considered to be high and further investigation necessary due to one or several factors including the following:

occurrence noted on-site and status if remedial action unknown; occurrence affected groundwater and is located up gradient from subject site.





# SECTION 4

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# POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

The following section documents the results of the visual site inspection conducted by RBF on December 19, 2002 and identifies potential areas in which an environmental condition could arise. Refer to both on and off-site photographs taken on December 19, 2002 presented at the end of Section 4.0, as a visual reference. For information regarding results of the historical and governmental records searches, refer to Section 3.0, HISTORICAL AND REGULATORY INFORMATION SEARCHES.

# 4.1 ON-SITE OBSERVATIONS

# 4.1.1 Methodology and Limiting Conditions

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions, including hazardous substances and petroleum products in connection with the property (including soils, surface water, and groundwater). During the December 19, 2002 site inspection, RBF performed a visual observation of readily accessible areas of the subject site and immediately adjoining properties. RBF encountered no conditions which limited the performance of this Assessment. However, it should be noted that interior access to on-site structures was not available at the time of this Assessment. Evidence of environmental conditions were noted within the boundaries of the subject site during the December 19, 2002 and are discussed in detail herein.

# 4.1.2 Description of On-Site Structures and/or Uses

Multiple structures are located within the boundaries of the subject site. The majority of the on-site structures are utilized as residential uses, which consist of both multi-and single-family housing. In addition to residential uses, on-site structures are utilized for commercial uses (retail and grocery stores), institutional uses (schools and churches), and light-industrial uses that are primarily utilized for automotive services. The on-site structures appeared to be situated on concrete foundations, of wood frame construction with either stucco or brick siding.

# 4.1.3 Asbestos Containing Material

Asbestos is a strong, incombustible, and corrosion resistant material which was used in many commercial products since prior to the 1940's and up until the early 1970's. If inhaled, asbestos fibers can result in serious health problems. Asbestos Containing Materials (ACMs) are building materials containing more than one percent (1%) asbestos (some state and regional regulators impose a one tenth of one percent (0.1%) threshold). Based upon the year the majority of the existing



structures present on the subject site were built (prior to 1978), the potential for asbestos containing materials (ACMs) to be found on-site is considered likely.

**'.1.4 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 constitute a material to be considered hazardous. In fact, if in good condition (no flaking or pealing), 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. Based upon the year the majority of the existing structures present on the subject site were built (prior to 1978), the potential for lead-based paints (LBPs) to be found on-site is considered likely.

# 4.1.5 Chemical Storage

Tanks

During the December 19, 2002 site inspection the subject site was inspected for fill pipes, vent pipes, areas of abnormal or heavy staining, manways, manholes, access covers, concrete pads not homogenous with surrounding surfaces, concrete build-up areas potentially indicating pump islands, abandoned pumping equipment, or fuel pumps. Visible evidence of underground storage tanks (USTs) was observed within the northern boundary of the subject site, primarily indicated by former fuel islands. More specifically, existing fuel islands were noted within the two north-western/eastern corners of the subject site at 866 Avenue I and 45159 Sierra Highway. In addition to visual inspection, USTs have been identified via Building Department Records, as noted in *Section 3.0*, for the following properties: 528 Avenue I, 802 Avenue I, 866 Avenue I, 610 Avenue I, 45159 Sierra Highway, and 45117 Sierra Highway. The aforementioned properties have historically contained USTs and may currently have USTs on-site.

## 4.1.6 Chemical Storage Areas The majority of the industrial prope

The majority of the industrial properties on-site are located on concrete foundations, and were observed to be primarily conducted within the interior of auto shops. Typically, common chemical wastes, oil, grease, solvents, and gasoline are associated with such uses.

Environmental Protection Agency (EPA) banned some uses of PCBs in 1977 and

**4.1.7 Spills** Based on review of available Building Department Records, 45167 and 45181 Fern Avenue have sumps installed on-site, which are utilized for waste oil. As documented in *Section 3.0.*, 610/630 West Avenue I has reported subsurface petroleum releases on-site which have impacted soils and groundwater.

# 4.1.8 Solid Waste Disposal No indication of on-site solid waste disposal practices (i.e. land-filling) were apparent during the December 19, 2002 site inspection. Dumpsters and trash recepticals were noted within various portions of the subject site; however, these are typical of neighborhood/residential uses and not considered to pose an

environmental condition.

# 4.1.9 Polychlorinated Biphenyls (PCBs) No evidence of PCB's were observed during the December 19, 2002 site inspection. However, it should be noted that multiple light industrial uses are located within the northern/northwestern portion of the subject site. Properties associated with auto service/sales may have hydraulic lifts on-site. Due to health impacts, the

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most production/use in 1979. However, many transformer's and other materials (such as hydraulic lifts and associated fluids) still contain PCBs. The primary concern with hydraulic lifts is the potential for subsurface leakages of hydraulic fluids from the lift's piston. No visible signs of staining or leakage was observed with respect to transformers located on-site.

- **4.1.10 Utilities** Typical roadside utilities (streetlights, transformers, overhead power lines) were noted during the December 19, 2002 site inspection. As previously mentioned, no visible signs of staining or leakage was observed.
- **4.1.11 Wells** No water wells were noted within the boundaries of the subject site during the December 19, 2002 inspection. Evidence of any monitoring, oil, injection, or dry wells was not observed on-site.
- 4.1.12 Pits, Ponds, Lagoons No evidence of pits, ponds, or lagoons were observed during the December 19, 2002 site inspection.
- **4.1.13 Septic Systems** No evidence of septic tanks or cesspools were observed on-site during the December 19, 2002 site inspection.

# 4.2 OFF-SITE OBSERVATIONS

As previously stated in Section 2.0, *Physical Setting*, an adjoining property is considered any real property or properties that the border of which is contiguous or partially contiguous with that of the subject site, or that would be contiguous or partially contiguous with that of the subject site but for a street, road, or other public thoroughfare separating them. An adjacent property is any real property located within 0.25 miles of the subject site's border. Visual observations of the publicly accessible portions of adjoining properties were conducted on December 19, 2002 as part of this Assessment and are described below.

- **4.2.1 Utilities** Typical utilities were observed immediately adjacent to the subject site during the December 19, 2002 site inspection. No recognized environmental condition associated with the utilities were noted.
- **4.2.2 Tanks** No visible or physical evidence to indicate the presence of aboveground fuel tanks were observed during the December 19, 2002 site inspection of immediately adjacent properties.

# 4.2.3 Hazardous Materials

During a preliminary observation of accessible adjoining properties on December 19, 2002, no visible or physical evidence was observed to suggest that a surface release of petroleum based material has recently occurred. No unusual or suspicious materials handling or storage practices were observed with respect to adjacent properties. However, it should be noted that mixed uses adjoin the subject site boundaries. It is anticipated that hazardous materials are used and stored within off-site properties, since many are utilized as gas stations, auto repair, and light-industrial uses. Additionally, as documented in *Section 3.0*, several off-site properties have been listed within EDR database for activities associated with hazardous materials (i.e., transferring, storing, subsurface releases, remediation, etc.)







Typical view of on-site residential sections and associated neighborhood roadways.



Typical view of an on-site alleyway (looking south).



View looking at the existing vacant lot that is located on the western portion of the subject site.

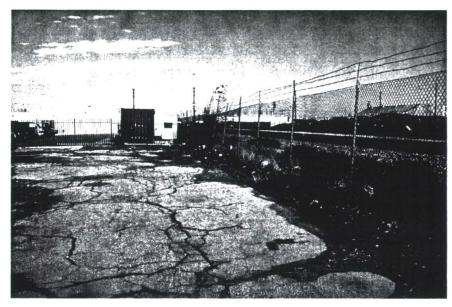


View looking at auto repair area and former gas station indicated by an existing "fuel island".

NO. DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN • PHASE I ESA **On-Site Photographs** 



1/14/03 JN 10-102041-9961



View of vacant parking area located within the eastern portion of the subject site.



View looking at commercial / light industrial uses which adjoin Sierra Highway.



View looking at existing on-site residential uses (view looking north).

1/\* \*\*\*\* 10-1020



View looking northwest at the senior center / housing area.

NO. DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN • PHASE I ESA On-Site Photographs



View of the former Chevron Station located southeast of the Avenue I / 10th Street West intersection.



View of light industrial uses along Avenue I, typical of the northern boundary.



View looking at on-site auto center.



View looking south towards D's Hitch Shop.

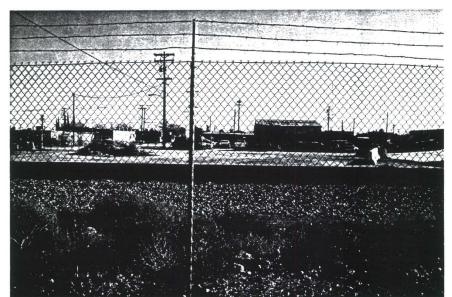
NO. DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN • PHASE I ESA On-Site Photographs



Exhibit 5C



View looking north at light industrial / commercial uses.



View looking at mixed uses which adjoin the subject sites eastern boundary (Metrolink Railroad).



View looking west along Avenue I.

NO. DOWNTOWN NEIGHBORHOOD REVITALIZATION/ TRANSIT VILLAGE PLAN • PHASE I ESA

**Off-Site Photographs** 

**Exhibit 6** 



# SECTION 5

## FINDINGS, OPINIONS, AND RECOMMENDATIONS

RBF has performed a Phase I Environmental Site Assessment in conformance with the Scope-of-Services and limitations of ASTM Standard Practice E 1527-00 for the proposed North Downtown Neighborhood Revitalization/Transit Village Plan located within the City of Lancaster, County of Los Angeles; also known as the subject site within this Assessment. Any exceptions to, or deletions from, this practice are described in Section 1.0, INTRODUCTION, of this report. This Assessment has revealed the following in connection with the subject site.

## 5.1 FINDINGS

## 5.1.1 Site Conditions

The subject site is comprised of several mixed uses. The December 19, 2002 inspection primarily focused on the northern and eastern portion of the subject site, which consists of light-industrial uses (auto-related). Recognized Environmental conditions were noted on-site and are discussed below. Refer to Section 4.0, for a detailed description of the site reconnaissance.

Visible evidence of underground storage tanks (USTs) was observed within the northern boundary of the subject site, primarily indicated by former fuel islands. More specifically, existing fuel islands were noted within the two north-western/eastern corners of the subject site at 866 Avenue I and 45159 Sierra Highway. In addition to visual inspection, USTs have been identified via Building Department Records, as noted in *Section 3.0*, for the following properties: 528 Avenue I, 802 Avenue I, 866 Avenue I, 610 Avenue I, 45159 Sierra Highway, and 45117 Sierra Highway. The aforementioned properties have historically contained USTs and may currently have USTs on-site. It should be noted that the installation and removal of USTs are often undocumented; RBF could not confirm the existence of USTS within on-site properties at the time of this Assessment.

Multiple light industrial uses are located within the northern portion of the subject site. The majority of the industrial properties were on concrete foundations, as services were conducted within the interior of auto shops. Typically, common chemical wastes from on-site maintenance operations include oil and grease, solvents from parts cleaning and repair work, and gasoline. The historical and present maintenance uses/materials within the northern industrial uses are considered to create a potential recognized environmental condition.

In addition, it was found that properties associated with auto service/sales may have hydraulic lifts on-site. Due to health impacts, the Environmental Protection Agency (EPA) banned some uses of PCBs in 1977 and most production/use in 1979. However, many transformer's and other materials (such as hydraulic lifts and associated fluids) still contain PCBs. The primary concern with hydraulic lifts is the potential for subsurface leakages of hydraulic fluids from the lift's piston. RBF could



not confirm the actual presence of PCBs associated with on-site lifts during the course of this Assessment. Consequently, no visible signs of staining or leakage was observed with respect to transformers located on-site.

**5.1.2 Public Records** Available public records were reviewed by Environmental Data Resources, Inc., on November 22, 2002 (refer to Section 3.0, *Historical and Regulatory Information Searches*). The purpose of this research was to verify if sites are located within the subject site boundaries or within a half-mile radius of the subject site which have been reported as contaminated or that generate hazardous materials.

The lists which were reviewed identified thirty-four (34) listed regulatory sites within the boundaries of the subject site. The lists identified sixty-one (61) listed regulatory sites located within a one-mile radius of the subject site. A potential "*recognized environmental condition*" on the subject site appears to be present as a result of reported subsurface petroleum discharges at 610/630 West Avenue I and 44949 10<sup>th</sup> Street West. Refer to Section 3.0, *Historical and Regulatory Information Searches*, for a detailed discussion of on-and off-site listed properties.

#### 5.1.3 Historic Recognized Environmental Condition(s)

A "historic recognized environmental condition" (HREC) is defined as a condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. HRECs are generally conditions which have in the past been remediated to the satisfaction of the responsible regulatory agency. No HRECs have been identified within the boundaries of the subject site; however, it should be noted that the northern portion of the subject site has historically been utilized for auto repair and maintenance services.

#### 5.1.4 Historical Use(s) Information

Based upon evaluation of the documented land use as demonstrated in the reviewed resources, the series of historic aerial photographs and maps, and the site inspection, the potential that adverse environmental conditions were created by previous uses of the subject site is considered to be probable.

Multiple light industrial uses are located within the northern portion of the subject site. Typically, common chemical wastes from on-site maintenance operations include oil and grease, solvents from parts cleaning and repair work, and gasoline. The historical and present maintenance uses/materials within the northern industrial uses are considered to create a potential recognized environmental condition.

#### 5.1.5 Adjacent Properties

The physical presence of hazardous materials on the subject site that may have been generated from adjacent properties were not visibly evident during the December 19, 2002 site inspection. However, one (1) adjacent property has reported subsurface releases of petroleum products and toxic chemicals which have impacted groundwater which underlies the southwestern boundary of the subject site. A closure status has not been granted by the appropriate regulatory agency for the following property:



**44949 10<sup>th</sup> Street West (Monte Vista Alta-Dena Dairy):** 44949 10<sup>th</sup> Street West is located approximately ¼-mile southwest of the subject site. The site is reported to be occupied by Monte Vista Alta-Dena Dairy and is utilized as a drive through convenience store. The site was originally developed in 1967 and has been previously used as a gas station and drive through store from approximately 30 years. Two (2) 12,000-gallon gasoline USTs were removed from the property in 1997. Due to reported subsurface releases, soil samples were taken from the property from approximately 20 to 50 feet below ground surface(bgs). Findings from the soil samples indicate that contamination is concentrated around the immediate vicinity of the former tanks. However, the lateral distribution of detectable concentrations of contaminants extends west to 11<sup>th</sup> Street, north to Jackman Street, east to 10<sup>th</sup> Street West and south to surrounding adjacent properties.

Monitoring wells along 10<sup>th</sup> Street had reported concentrations slightly above the Regional Water Quality Control Board's (RWQCB) Maximum Contaminant Levels for drinking water (MCLs). Proposed impacts and improvements to 10<sup>th</sup> Street (within the vicinity of the subject site) are anticipated to be a component of the proposed revitalization project. Due to positive findings of contamination, a potential for an environmental concern is located within the subject site's southwestern border and 10<sup>th</sup> Street.

### 5.1.6 Other Potential Sources of Hazardous Material

The presence of hazardous materials on the subject site that may have been generated from adjacent properties was not visually or physically evident.

## 5.2 CONSULTANT'S OPINION/RECOMMENDATION

The following opinions are based on 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 inspection:

Demolition and construction activities are assumed to be part of the North Downtown Neighborhood Revitalization/Transit Village Plan. At least one (1) on-site property (610/630 West Avenue I) has reported subsurface petroleum releases within the northern portion of the subject site. The property has impacted soil and groundwater; however, the extent of lateral contamination remains undefined. Additionally, one (1) off-site property located at 44949 10<sup>th</sup> Street West has contaminated groundwater which underlies the subject site's southwestern boundary.

Should construction/demolition require dewatering activities or groundwater is expected to be encountered, a qualified hazardous materials consultant with Phase II and Phase III experience should review groundwater documents regarding site characterization and/or closure status for 610/630 West Avenue I and 44949 10<sup>th</sup> Street West.

 Polychlorinated Biphenyl (PCB) fluids may be present within hydraulic lifts located within the interior of the on-site shops associated with automobile maintenance.



Based upon the year the existing structures located on the subject site were built (prior to 1978), lead-based paint and asbestos may be present within the structures and would need to be handled properly prior to any remodeling or demolition activities.

## **5.3 FORMAL RECOMMENDATIONS**

Based on the records and other data reviewed during the preparation of this Phase I Environmental Site Assessment, in accordance with ASTM Standard Practice E 1527-00 and the scope-of-services, and subject to the limitations thereof, the following formal measures are recommended prior to and during the construction phase:

#### 5.3.1 Pre-Construction Measures

Should construction/demolition require dewatering activities or groundwater is expected to be encountered, a qualified hazardous materials consultant with Phase II and Phase III experience should review groundwater documents regarding site characterization and/or closure status for 610/630 West Avenue I and 44949 10<sup>th</sup> Street West.

All stained concrete should be removed and disposed of to an appropriate permitted facility. Once removed, exposed soils should be visually observed to confirm the presence/absence of staining (an indication of contamination migration into the subsurface). If observed, stained soils should be tested to identify appropriate remedial activities (if necessary).

The interior of individual on-site structures within the project site should be visually inspected prior to demolition or renovation activities, with particular attention to all industrial uses. Should hazardous materials be encountered with any on-site structure, the materials should be tested and properly disposed of in accordance with State and Federal regulatory requirements. Any stained soils or surfaces underneath the removed materials should be sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.

### 5.3.2 Construction Activities

If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contractor shall:

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the Project Engineer of the implementing Agency;
- Secure the area a directed by the Project Engineer; and
- Notify the implementing agency's Hazardous Waste/Materials Coordinator.

# **5.3.3 Asbestos** The National Emission Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of asbestos containing materials (ACMs) prior to the commencement of any remedial work, including demolition. Prior to demolition work, it is recommended that areas be sampled as part of an asbestos survey.



Any demolition of the existing buildings must comply with State law, which requires a contractor, where there is asbestos-related work involving 100 square feet or more of ACMs, to be certified and that certain procedures regarding the removal of asbestos be followed.

## 5.3.4 Lead-Based Paint

If during demolition of the structures, paint is separated from the building material (e.g., chemically or physically), the paint waste should be evaluated independently from the building material to determine its proper management. According to the Department of Substances Control, if paint is not removed from the building material during demolition (and is not chipping or peeling), the material could be disposed of as construction debris (a non-hazardous waste). It is recommended that the landfill operator be contacted in advance to determine any specific requirements they may have regarding the disposal of lead-based paint materials.





## SECTION 6

## REFERENCES

1953 - 1994 Historical Aerial Photographs provided by Environmental Data Resources, Inc.

Date	Approximate Scale	Reference #	
1994 1989 1968 1953	1"=666' 1"=666' 1"=555'	886480.4 886480.4 886480.4 886480.4	

<u>Air Sparge/Soil Vapor Extraction Well installation Report</u> for 918 Lancaster Boulevard, prepared by Delta Environmental Consultants, Inc., dated March 6, 2002.

<u>Building Department Records</u>, provided by the City of Lancaster, review conducted on January 13, 2003.

<u>California Department of Oil, Gas, and Geothermal Resources</u> (<u>DOGGR</u>), Wildcat Map #W1-1, Orange, Riverside, and San Benardino Counties, dated April 24, 1999.

<u>Corrective Action Plan: 610 West Avenue I</u>, prepared by Environmental Assessment and Remediation Management, Inc., dated August 28, 2002.

Corrective Action Plan: ARCO Service Station No. 3030, dated March 1998.

City of Lancaster General Plan/Master Environmental Assessment, 1997.

<u>Digital Sanborn Map Database (provided by the Sanborn Map Company</u> <u>2001)</u>, Lancaster, 1910 through 1934.

EPA Map of Radon Zones, U.S. EPA, 1993.

<u>File Review</u>, Regional Water Quality Control Board-Lahontan Region, conducted on January 8, 2003.

<u>Governmental Records</u>, Environmental Data Resources, Inc., November 22, 2002.

<u>Initial Study/Environmental Checklist</u>, North Downtown Neighborhood Revitalization/Transit Village Plan, prepared by RBF Consulting, dated October 16, 2002.



<u>Quarterly Monitoring Report for 44949 10<sup>th</sup> Street</u>, prepared by PW Environmental, dated September 10, 2002.

<u>Schedule of Remediation System Installation for the Former Chevron</u> <u>Bulk Fuel Facility 100-1488</u>, prepared by Wayne Perry, Inc., dated December 19, 2002.

Site Inspection, conducted on December 19, 2002.

<u>Site Specific Quarterly Report for 44813 Yucca Avenue</u>, Water Resources Control Board, June 1, 1994 through September 30, 1994.

Soil Survey of Los Angeles County, California, September 1978.

Supplemental Site Assessment Report: Former Everest Economy Gas, 610 West Avenue I, prepared by Environmental Assessment and Remediation Management, Inc., dated May 24, 2002.

<u>Telephone Interview</u>, Ms. Pat Hall, Los Angeles County Fire Department, conducted on December 3, 2002.

<u>Telephone Interview</u>, Custodian of Records, County of Los Angeles Health Care Agency, conducted on December 2, 2002.

<u>Telephone Interview</u>, Custodian of Records, Los Angeles County Department of Public Works, conducted on December 4, 2002.

Thomas Brothers Map, Los Angeles and Orange Counties, 2003.

<u>USGS Topographic Quadrangles</u>, Lancaster West, California Quadrangle, dated 1974.

<u>USGS Topographic Quadrangles</u>, Lancaster West, California Quadrangle, 1958 through 1974.



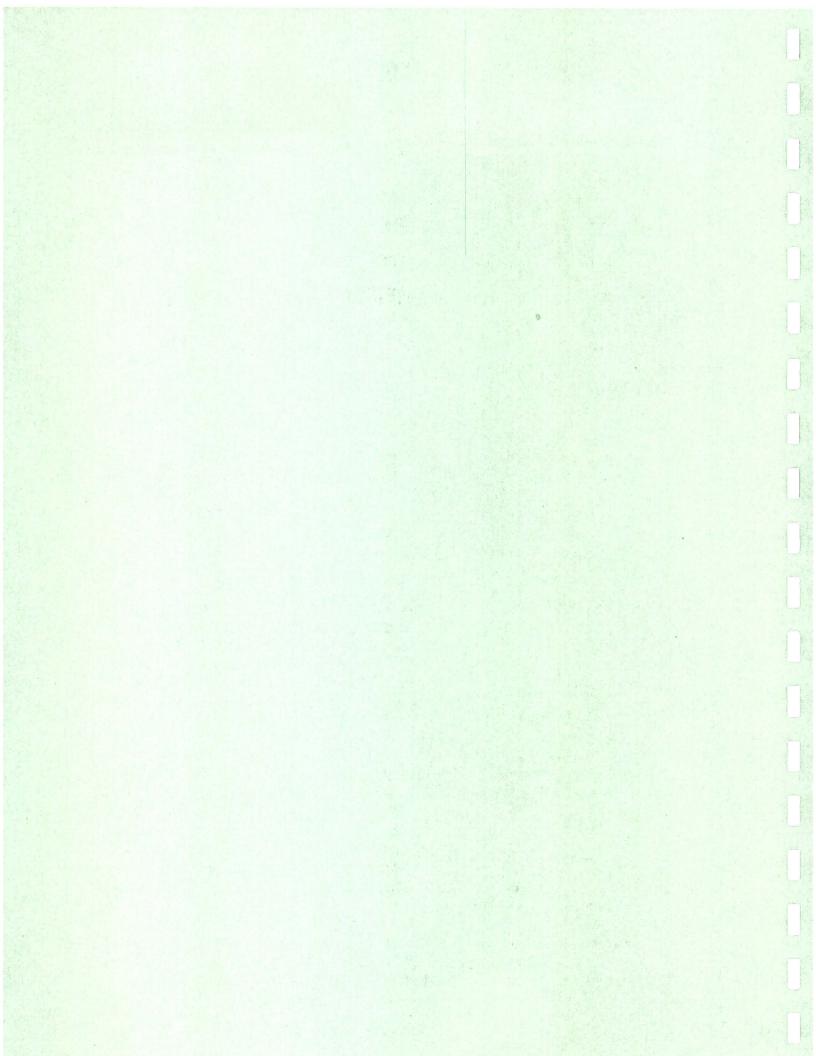


## SECTION 7

NOTE TO REVIEWERS:

THE HAZARDOUS MATERIALS STUDY TECHNICAL APPENDICES ARE AVAILABLE FROM THE CITY UPON REQUEST. PLEASE CONTACT GLENN LAJOIE AT RBF CONSULTING (949.855.3663).

# **15.8 Correspondence**





JAMES A. NOYES, Director

## **COUNTY OF LOS ANGELES**

## DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE W-9

## RECEIVED

JAN 3 2003

**RBF CONSULTING** 

Mr. Glenn Lajoie RBF Consulting Incorporation P.O. Box 57057 Irvine, CA 92619-7057

Attention Starla Hack

December 30, 2002

Dear Mr. Lajoie:

## REQUEST FOR SANITARY SEWER INFORMATION NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN CITY OF LANCASTER

As requested, we have reviewed the project description for preparation of an Environmental Impact Report for the proposed project and offer the following answers to your questionnaire:

1. The City of Lancaster owns, and the Los Angeles County Department of Public Works Consolidated Sewer Maintenance District (CSMD) maintains, the local sanitary sewers within the project area. Maintenance services are provided by the CSMD's North Yard, located at 45712 Division Street, in Lancaster. We have enclosed a copy of our Sewer Maintenance Index Map No. 1882 showing the location of the existing local sewer lines maintained by this Division. As-built sewer plans showing the size and the depth of these lines can be obtained from the City of Lancaster.

The trunk line and treatment plant affected by the proposed project are owned and operated by the County Sanitation Districts of Los Angeles County.

- 2. The applicable wastewater generation rates for development can be found in Los Angeles County Code Title 20, Division 2 and 3 (see enclosed). We do not have the data on existing sewage flow in the project area, therefore, an engineering study and/or flow measurements may be necessary to determine this. Contact the City of Lancaster.
- 3. The majority of these areas are already within the CSMD, however some areas within the proposed project are subject to annexation to the CSMD for the collection of annual sewer service charges to operate and maintain sewer facilities.

Mr. Glenn Lajoie December 30, 2002 Page 2

- 4. Implementation of the proposed project may create a significant increase in service demand. This should, however, not significantly impact overall operation of the CSMD.
- 5. Contact the County Sanitation District of Los Angeles County regarding wastewater treatment.

Very truly yours,

JAMES A. NOYES Director of Public Works

BRIAN D. HOOPER ' Assistant Deputy Director Waterworks and Sewer Maintenance Division

KK:tm 5м8699

Enc.

20.32.420

E. Resubmission of abandoned and expired plans shall be subject to new plan check fees as specified in Section 20.32.230. (Ord. 11716 § 26, 1978: Ord. 10020 § 3 (part), 1970: Ord. 8690 § 10 (part), 1964: Ord. 6130 Part 5 Ch. 6 § 5605, 1952.)

20.32.430 Sewer easement requirements. A. A person desiring to construct a sewer in an easement under the provisions of this Division 2 shall present to the county engineer a request for processing, sufficient information to enable the preparation of a written description, and the fee specified in Section 20.32.240.

B. The location and dimensions of sanitary sewer easements shall be sufficient to provide present and future sewer service to abutting areas and adequate access for maintenance as determined by the county engineer.

C. Until the required easements have been properly executed and recorded:

1. No plans shall be approved by the county engineer for sever facilities to be constructed by any person across the property of others;

2. No sewer facilities shall be accepted for public use. nor placed in use by any person. (Ord. 10020§3 (part), 1970: Ord. 8690§11, 1964: Ord. 6130 Part 5 Ch. 6§ 5605.1, 1952.)

20.32.440 Main-line sewers — Size specifications. A. The size of main-line sewer pipe shall be determined by standards of design and the coefficients listed below, but in no case shall it be less than eight inches inside diameter.

For zoning in the following	Coefficient		
categories for residential areas:	Cu. ft. per sec. per acre		
R-1	0.004		
R-2	0.008		
R-3	0.012		
R-4	0.016*		
For commercial areas:			
C-1 through C-4	0.015*		
For because in the state in the second			

For heavy industrial areas:

M-1 through M-4

0.021\*

\*Individual building, commercial or industrial plant capacities shall be the determining factor when they exceed the coefficients shown.

B. The coefficient to be used for any zoned area not listed will be determined by the county engineer based upon the intended development and use.

C. The county engineer shall determine which of the coefficients or combination of coefficients shall be used for design, as determined by the established or proposed zoning in the study area. Any modifications to these coefficients due to topography, development or hazard areas shall be approved by the county engineer. (Ord. 8690 § 12 (part), 1964: Ord. 6130 Part 5 Ch. 6 § 5606, 1952.)

20.32.450 Main-line sewers — Minimum velocity. A mainline sewer shall be designed to provide a minimum velocity of two feet per second for pipes flowing

## **City of Lancaster**

44933 North Fern Avenue Lancaster, California 93534-2461 661-723-6000

## RECEIVED

# DEC 3 0 2002 RBF CONSULTING



Frank C. Roberts Mayor

Bishop Henry W. Hearns Vice Mavor

> Jim Jeffra Council Member

Ed Sileo Council Member

Andrew D. Visokey Council Member

James C. Gilley City Manager

December 24, 2002

Ms. Starla Hack Environmental Analyst RBF Consulting 14725 Alton Parkway Irvine, CA 92618-2027

Dear Ms. Hack:

Printed on recycled paper

I am submitting the following response pursuant to your request regarding Parks and Recreation facilities that serve the North Downtown Regional Transit Village Plan.

1. Please indicate the location of the facilities which serve the project site.

There are currently no park facilities within the specific project site. However, Jane Reynolds Park (6.8 acres) is located approximately <sup>1</sup>/<sub>4</sub> mile south of Lancaster Boulevard between Fig and Elm Streets. Carter Park, a 60-acre community park in early stages of construction, is located approximately <sup>3</sup>/<sub>4</sub> mile north of the project site on Sierra Highway.

2. What are the generation factors for the proposed land use?

With reference to the Parks and Recreation facilities, the generation factors for the proposed land use which include new residences, the construction of two private schools, churches and service agencies.

3. Do you anticipate impacts to the park and recreation facilities?

Yes. Any new residents or commercial development will impact the number of people in the area. The construction of two additional private school facilities will require outdoor athletic and recreation space.

## City of Lancaster

Ms. Starla Hack December 24, 2002 Page 2

4. *Please indicate if there will be any required fees to help mitigate potential impacts to park and recreation facilities.* 

Yes. The City assesses impact fees to residential developments for park acquisition, park development and park maintenance.

5. *Will park dedication be required as part of this project to mitigate potential impacts?* 

Not specifically. Park dedication will be addressed through the various impact fees.

6. Do you have any required or recommended mitigation measures for significant impacts?

Security and athletic lighting will be required on park facilities serving the schools for late afternoon and evening use.

7. Is there any other relevant information regarding potential impacts of the project?

Not at this time.

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?)

Yes. Park development would be necessary to address the future influx of residences to maintain our standard of 5 acres of park land per 1,000 residences.

If you have further questions, please feel free to contact me directly at (661) 723-6080.

Sincerely,

Thele. mit

Lyle W. Norton Parks, Recreation and Arts Director

LWN:cjc



## COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998 Telephone: (562) 699-7411, FAX: (562) 699-5422 www.lacsd.org

JAMES F. STAHL Chief Engineer and General Manager

December 31, 2002 File: 31R-100.10

RECEIVED

JAN 3 2003

**RBF CONSULTING** 

Ms. Starla Hack Environmental Analyst 14725 Alton Parkway Irvine, CA 92618-2027

Dear Ms. Hack

#### North Downtown Neighborhood Revitalization Transit Village Plan <u>Environmental Impact Report</u>

The Sanitation Districts have received your letter, dated December 11, 2002 with the attached Drainage Facility Questionnaire and the Solid Waste Questionnaire. The City of Lancaster and the Los Angeles County Department of Public Works can answer the drainage facility questions. We offer the following comments in regard to solid waste management for the above-mentioned project within the City of Lancaster:

1. The California Integrated Waste Management Board's website at <u>http://www.ciwmb.ca.gov</u> contains information regarding local solid waste disposal facilities. The choice of which landfill to use is made by the hauler that serves the project area. None of the landfills operated by the Sanitation Districts accept waste generated within the City of Lancaster. For information regarding disposal in the project area, please contact the City of Lancaster, Department of Public Works.

It should be noted that there are only eight major landfills within Los Angeles County and that these landfills serve large geographic areas that are not necessarily limited to those areas in the immediate vicinity of these sites. There is insufficient permitted disposal capacity within the existing system serving Los Angeles County to provide for its long-term disposal needs. There is additional capacity potentially available within Los Angeles County through the expansion of the Sunshine Canyon Landfill, and outside of Los Angeles County through the use of waste-by-rail at the proposed Eagle Mountain Landfill in Riverside County and the proposed Mesquite Regional Landfill in Imperial County. However, while this additional capacity is needed, the necessary permits and approvals have not yet been issued to access and/or use these facilities.

- 2. The City of Lancaster may have estimated tonnage currently picked up from the project area.
- 3. The Sanitation Districts does not develop solid waste generation rates. The solid waste generation can be estimated by the City of Lancaster.
- 4. The City of Lancaster can advise if solid waste pickup service will be available for the project.
- 5. See response to question 1.

#### Ms. Starla Hack

- 6. The California Integrated Waste Management Act, AB 939, requires cities to divert 50 percent of the wastestream away from land disposal by the year 2000. In order to lessen the impacts to the solid waste management system serving Los Angeles County, as well as assist in meeting AB 939 goals, the Sanitation Districts recommend that the proposed development incorporate storage and collection of recyclables into each project design. All occupants should be encouraged to recycle at a minimum, cardboard, newspaper, glass bottles, aluminum and bimetal cans, and P.E.T. bottles. Recycling should be included in the design of the project by reserving space appropriate for the support of recycling, such as adequate storage areas and access for recycling vehicles. In addition, all contractors should be urged to recycle construction and demolition wastes to the extent feasible. It should be recognized that, even with recycling, adequate regional disposal capacity is needed to accommodate new developments. If you have any further questions about recycling, please contact Bill George, Recycling Coordinator for the Sanitation Districts, at (562) 699-7411, extension 2427.
- 7. The City of Lancaster and the Los Angeles County Department of Public Works can provide other relevant information regarding significant project impacts.
- 8. The City of Lancaster can provide information on federal, state, and local statutes and regulations that the proposed project would be required to comply with.

If you have any questions regarding these comments, please contact the undersigned at (562) 699-7411, extension 2405.

Very truly yours,

James F. Stahl

Monione Valentue a

Monique Valenzuela Associate Engineer Solid Waste Management Department

MV:sdp Enclosure

RECEIVED

JAN 1 3 2003



LEROY D. BACA, SHERIFF

County of Los Angeles Sheriff's Department Keadquarters 4700 Ramona Boulevard Monterey Park, California 91754-2169



(661) 948-8466

January 6, 2003

Starla Hack Environmental Analyst RBF Consulting P.O. Box 57057 Irvine, California 92619-7057

Dear Ms. Hack:

My staff and I have reviewed the information you sent us (your correspondence dated December 11, 2002) concerning the proposed North Downtown Neighborhood Revitalization Transit Village Plan for the City of Lancaster. The following is our response to your questionnaire concerning police service.

- The Lancaster Sheriff's Station is located at 501 West Lancaster Boulevard, Lancaster.
- The Lancaster Sheriff's Station serves a geographical area consisting of approximately 600.88 square miles (City of Lancaster: 94.50 square miles; Unincorporated county: 506.38 square miles). We serve a population of approximately 152,000 residents (City of Lancaster: 123,000; Unincorporated county: 29,000).
- On average, the following numbers of patrol cars presently serve the project area vicinity: EM shift: five (5) general law cars and two (2) traffic cars; Day shift: seven (7) general law cars and six (6) traffic cars; and PM shift: ten (10) general law cars and four (4) traffic cars.
- The Lancaster Sheriff's Station is located at the southwest border of the project. Our response time from the station is approximately one (1) minute.

## A Tradition of Service

North Downtown Neighborhood Revitalization Transit Village Plan - Sheriff's Response

- While vehicular and pedestrian traffic will likely increase in the project area, we do not believe it would create a significant impact that would necessitate the need for additional manpower or patrol cars.
- We do not require or recommend any mitigation measures for significant impacts of the project.
- We have no other relevant information regarding significant project impacts.
- We do not anticipate that project implementation would result in the need for physical additions to our agency.

Thank you for giving us the opportunity to review the proposed project and provide our input. If you have any questions concerning our response, please feel free to contact me or Lieutenant Steven Fredericks at (661) 948-8466.

Sincerely,

LEROY D. BACA, SHERIFF

Thomas E. Pigott, Captain Commander, Lancaster Station



## **COUNTY OF LOS ANGELES**

#### FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330



P. MICHAEL FREEMAN FIRE CHIEF FORESTER & FIRE WARDEN

January 9, 2003

Starla Hack, Environmental Analyst RBF Consulting 14725 Alton Parkway Irvine, CA 92618-2027

Dear Ms. Hack:

## NOTICE OF PREPARATION/DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN,"CITY OF LANCASTER" -- (EIR #1550/2002)

The Notice of Preparation/Draft Environmental Impact Report for the North Downtown Neighborhood Revitalization Transit Village Plan has been reviewed by the Planning Section, Land Development Unit, and Forestry Division of the County of Los Angeles Fire Department. The following are their comments:

## FIRE PROTECTION AND EMERGENCY MEDICAL SERVICE AVAILABILITY:

The subject development will receive fire protection and paramedic service from the County of Los Angeles Fire Department. Fire Station 33, located at 44947 Date Avenue, Lancaster, CA 93534-3213, is the jurisdictional station for this property. This station is inside the project area and has a 3-person engine, a 4-person quint (a combination engine/ladder truck apparatus) and a 2-person paramedic squad. Additional resources in the area are listed below. Following are the closest response units, their distance, approximate response time, and staff:

EQUIPMENT	<b>DISTANCE/MILES*</b>	TIME /MINUTES*	STAFFING
Engine 134	4.4	15	3
USAR Squad (a) 134	4.4	15	3
Engine 135	4.5	14	3

(continued)

#### SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS ARTESIA AZUSA BALDWIN PARK BELL BELL GARDENS BELLFLOWER 
 BRADBURY
 CUDAHY

 CALABASAS
 DIAMOND BAR

 CARSON
 DUARTE

 CERRITOS
 EL MONTE

 CLAREMONT
 GARDENA

 COMMERCE
 GLENDORA

 COVINA
 HAWAIIAN GARDENS

HAWTHORNE HIDDEN HILLS HUNTINGTON PARK INDUSTRY INGLEWOOD IRWINDALE LA CANADA-FLINTRIDGE LA MIRADA LA PUENTE LAKEWOOD LANCASTER LAWNDALE LOMITA LYNWOOD MALIBU MAYWOOD NORWALK PALMDALE PALOS VERDES ESTATES PARAMOUNT PICO RIVERA POMONA RANCHO PALOS VERDES ROLLING HILLS ROLLING HILLS ESTATES ROSEMEAD SAN DIMAS SANTA CLARITA SIGNAL HILL SOUTH EL MONTE SOUTH GATE TEMPLE CITY WALNUT WEST HOLLYWOOD WESTLAKE VILLAGE WHITTIER

EQUIPMENT	DISTANCE/MILES*	TIME /MINUTES*	STAFFING
Engine 129	4.4	13	3
Squad 129	4.4	13	2
EST (b) 129	4.4	13	3
Engine 130	4.6	11	3
Engine 117	4.6	17	4
* to Fire Station 33			

(a) Urban Search and Rescue - has engine company capabilities

(b) Emergency Support Team - provides augmented manpower to major incidents

Any development will increase the service demand on existing resources. Although this development would be in proximity to existing fire stations, it would increase service demand on the existing fire protection resources in the general area. Additional manpower, equipment, and facilities are needed in the area now.

The applicant shall participate in an appropriate financing mechanism, such as a developer fee or an in-kind consideration in lieu of developer fees, to provide funds for fire protection facilities which are required by new development in an amount proportionate to the demand created by this project. Currently, the developer fee is a set amount per square foot of building space, adjusted annually, and is due and payable at the time a building permit is issued. In the event that the developer fee is no longer in effect at the time of building permit issuance, alternative mitigation measures shall be required.

The developer fee is currently about \$1 per 5 square feet. Payment of the fee constitutes mitigation in full.

## GENERAL REQUIREMENTS:

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and hydrants.

Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.

Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width, unobstructed, clear-to-sky. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

When a bridge is required, to be used as part of a fire access road, it shall be constructed and maintained in accordance with nationally recognized standards and designed for a live load sufficient to carry a minimum of 75,000 pounds.

The maximum allowable grade shall not exceed 15% except where the topography makes it impractical to keep within such grade, and then an absolute maximum of 20% will be allowed for up to 150 feet in distance. The average maximum allowed grade, including topography difficulties, shall be no more than 17%. Grade breaks shall not exceed 10% in 10 feet.

When involved with a subdivision, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.

Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems, it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

## NON-RESIDENTIAL - COMMERCIAL - INDUSTRIAL - INSTITUTIONAL:

Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

- 1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
- 2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.
- 3. Additional hydrants will be required if hydrant spacing exceeds specified distances.

- 4. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.
- 5. A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.
- 6. A Fire Department approved turning area shall be provided at the end of a cul-de-sac.

Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. All on-site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:

- 1. Provide 28 feet in width, when a building has three or more stories, or is more than 35 feet in height, above access level. Also, for using fire truck ladders, the centerline of the access roadway shall be located parallel to, and within 30 feet of the exterior wall on one side of the proposed structure.
- 2. Provide 34 feet in width, when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.
- 3. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.
- 4. "Fire Lanes" are any ingress/egress, roadway/driveway with paving less than 34 feet in width, and will be clear-to-sky. All "Fire Lanes" will be depicted on the final map.
- 5. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

#### **HIGH-DENSITY RESIDENTIAL:**

Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

- 1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
- 2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.
- 3. When cul-de-sac depth exceeds 200 feet, hydrants will be required at the corner and mid-block.
- 4. Additional hydrants will be required if the hydrant spacing exceeds specified distances.

Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. When serving land zoned for residential uses having a density of more than four units per net acre:

- 1. A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length.
- 2. The length of the cul-de-sac may be increased to 1,000 feet if a minimum of 36 feet in width is provided.
- 3. A Fire Department approved turning area shall be provided at the end of a cul-de-sac.

All on-site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. The 26-feet width does not allow for parking, and shall be designated as a "Fire Lane," and have appropriate signage. The 26 feet in width shall be increased to:

1. Provide 34 feet in width when parallel parking is allowed on one side of the access way.

- 2. Provide 36 feet in width when parallel parking is allowed on both sides of the access way.
- 3. Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final recording map, and final building plans.
- 4. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

## SINGLE-FAMILY DWELLING UNITS:

Single-family detached homes shall require a fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Fire hydrant spacing shall be 600 feet and shall meet the following requirements:

- 1. No portion of lot frontage shall be more than 450 feet via vehicular access from a public fire hydrant.
- 2. No portion of a structure should be placed on a lot where it exceeds 750 feet via vehicular access from a properly spaced public fire hydrant.
- 3. When cul-de-sac depth exceeds 450 feet on a residential street, hydrants shall be required at the corner and mid-block.

4. Additional hydrants will be required if hydrant spacing exceeds specified distances.

Fire Department access shall be provided to within 150 feet of all portions of the exterior walls of the first story of any single unit. If exceeding 150 feet, provide 20 feet, paved width "Private Driveway/Fire Lane" to within 150 feet of all portions of the exterior walls of the unit. Fire Lanes serving 3-4 units shall be increased to 24 feet in width, and if serving 5 or more units, the Fire Lane shall be increased to 26 feet. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all culde-sacs. Streets or driveways within the development shall be provided with the following:

1. Provide 36 feet in width on all collector streets and those streets where parking is allowed on both sides.

- 2. Provide 34 feet in width on cul-de-sacs up to 700 feet in length. This allows parking on both sides of the street.
- 3. Provide 36 feet in width on cul-de-sacs from 701 to 1,000 feet in length. This allows parking on both sides of the street.
- 4. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.
- 5. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road.
- 6. A Fire Department approved turning area shall be provided, at the end of a driveway of 300 feet or more in length.

### LIMITED ACCESS DEVICES (GATES ETC.):

All access devices and gates shall meet the following requirements:

- 1. Any single gate used for ingress and egress shall be a minimum of 26 feet in width, clear-to-sky.
- 2. Any gate used for a single direction of travel, used in conjunction with another gate, used for travel in the opposite direction, (split gates) shall have a minimum width of 20 feet each, clear-to-sky.
- 3. Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way, and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.
- 4. All limited access devices shall be of a type approved by the Fire Department.
- 5. Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates.

## **TRAFFIC CALMING MEASURES:**

All proposals for traffic calming measures (speed humps/bumps, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review, prior to implementation.

Should any questions arise regarding design and construction, and/or water and access, please contact Inspector J. Scott Greenelsh at (323) 890-4235.

## OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed in the Environmental Impact Report.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Savid R. Seeninger

DAVID R. LEININGER, CHIEF, FORESTRY DIVISION PREVENTION BUREAU

DRL:lc

## The Gas Company<sup>®</sup>

January 13, 2003

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JAN 1 6 2003

## **RBF CONSULTING**

Starla Hack R B F CONSULTING 14725 Alton Parkway Irvine, CA 92618-2027

## Subject: North Downtown Neighborhood Revitalization Transit Village Plan/ Project Environmental Impact Report, City of Lancaster, County of Los Angeles, California (SCG Atlas # LAN 12, 13)

In response to your Environmental Impact Questionnaire:

1) The Project lies entirely within the S.C. Gas Co. Utility Service Territory. Medium pressure mains exist throughout the Project area in the streets and alleys. New service / mains can be extended into individual portions as needed from these facilities.

2) The Gas Co. facilities are medium pressure gas mains (pipelines) fed from high pressure lines via pressure regulating stations within one mile of the Project. The present capacity has been constructed on a computer model, including The Project and adjacent areas, at total build-out (Design capacity and %-of-use are proprietary). The current model does *not* include medium or heavy industrial areas within the Project area. Thus SCG has no known existing service deficiencies here.

3) We generally use 50cfh/residential unit for long term load planning. Restaurant, hotel, commercial and industrial gas load is too variable to plan into the future.

4) Based upon the Project's Land Use and Proposed Zoning, The Gas Company anticipates **no** Project related or cumulative impacts to the natural gas provisions or gas facilities in the service area. Implementation of the proposed project would **not** adversely affect our service capabilities of the project area or the existing adjacent service areas. The Project, in the process of applying for permits, will not conflict with laws and regulations regarding energy conservation.

5) The Gas Company does not anticipate any construction related impacts to the service area. The Project pipelines would be installed in "joint-trench" with other dry utilities. Easements will be required for gas main extended into the Project. We extend the pipeline system using "hot taps". *No customers are disrupted with this gas handling method*. The Gas Company is a member of the Underground Service Alert (U.S.A.). Call the Project Manager, below before abandoning / demolishing buildings.

E

#### Southern California Gas Company

9400 Oakdale Avenue Chatsworth, CA 91313-2300

Mailing Address: Box 2300 Chatsworth, CA 91313-2300 6) No additional mitigation measures will be required if the project is developed as proposed.

(7) To mitigate potential adverse (non-environmental) impacts or delays, advise the applicant to:

- a) Notify the builder that any SCG facilities within non-dedicated (private) areas will have an easement granted to the Southern California Gas Co to protect the facilities.
- b) Request the latest SCG facility plans (gis atlases) for their civil drawings.
- c) Request a SCG will-serve letter from SCG Planning/Engineering Deptartment at the commencement of the project and before each phase of the project. This notice *ensures* adequate gas supply and pressure to serve the project.
- d) Provide the EIR or equivalent environmental document (if any) to SCG.
- e) Provide notice and plans of street vacation and annexation actions related to the tentative map.
- f) Provide notice and plans of off-site street improvements to SCG.
- g) Provide tentative/approved tract/parcel maps and condo plans to SCG.
- h) Contact SCG concerning the **relocation**, **abandonment or removal** of any conflicting *existing* SCG facilities.

Additionally, have the applicant contact the New Business Project Manager, Mr. Art Parish at (818) 701-2501 or visit our website <u>www.socalgas.com</u> for information on current energy efficiency programs, gas equipment or how to start a gas line extension.

Please forward the Draft EIR to me at this office. If you require further information, call me at (818) 701-3324.

Sincerely.

Jim Hammel Technical Services, North Region (818) 701-3324 FAX: (818) 701-3380

c: A. Parish, Lancaster Distribution Ops District
O. Rivera, Eng., Masterplan
B. Huleis, Environmental Compliance
City Correspondence File

Library

MARGARET DONNELLAN TODD COUNTY LIBRARIAN

### RECEIVED

JAN 1 6 2003

January 15, 2003

**RBF CONSULTING** 

Ms. Starla Hack Environmental Analyst **RBF Consulting** 14725 Alton Parkway Irvine, CA 92618

#### NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN REQUEST FOR COMMENTS

Dear Ms. Hack:

This is in response to your request for information on the above-referenced project. Following are our responses to your questions:

### 1. What is the present service area and/or location(s) of the library facility that would serve the project area?

The project would be in the Lancaster Library service area. The Lancaster Library is located at 601 W. Lancaster Blvd., Lancaster, CA 93534.

# 2. What is the present capacity of your facility? (Please provide any available information necessary to evaluate existing conditions in the project area and potential impacts).

Currently, the Lancaster Library serves a population of 121,151 (Census 2000 data). The library has a collection of 303,035 books and other materials (i.e., videos, periodicals, etc.) and is 48,721 square feet in size. The library uses a planning standard of 3.09 persons per household, 0.5 square foot per capita and 2.0 books and other materials per capita. Though the Lancaster Library is inadequate with regards to facility space to serve the current population, it has an adequate supply of books and other materials.

#### 3. What is the projected demand for the project based upon the information provided?

The project would necessitate the need for an additional 408 square feet of facility space and 1,632 books and other materials.

Serving the unincorporated areas of Los Angeles County and the cities of: Agoura Hills • Artesia • Avalon • Baldwin Park • Bell • Bell Gardens • Bellflower • Bradbury • Carson • Claremont • Compton • Cudahy • Culver City • Diamond Bar • Duarte • El Monte • Gardena • Hawaiian Gardens • Hawthorne • Hermosa Beach • Hidden Hills • Huntington Park • La Canada Flintridge • La Habra Heights • Lakewood • La Mirada • Lancaster • La Puente • La Verne • Lawndale • Lomita • Lynwood • Malibu • Manhattan Beach • Maywood • Montebello • Norwalk • Paramount • Pico Rivera • Rosemead • San Dimas • San Fernando • San Gabriel • Santa Clarita • South El Monte • South Gate • Temple City • Walnut • West Covina • West Hollywood • Westlake Village

Ms. Starla Hack January 15, 2003 Page 2

## 4. Do you anticipate any project related impacts to your facility? Specifically, will the proposed project impact service or require new or modified facilities? If so, please list/summarize additions or modifications.

Yes, the proposed project would impact local library services. However, the impact would not require a new facility.

## 5. Do you require or recommend any mitigation measures for any projects impact noted in Items 3, 4 or 5?

The Public Library requires that new residential development in the unincorporated areas of Los Angeles County pay mitigation fees on a per dwelling unit basis. Since the project is in the incorporated City of Lancaster, it is not subject to the library's mitigation fees. The library does, however, encourage payment of the mitigation fees to mitigate the impact on library services. The City of Lancaster is in the Library's Planning Area 2. The fee for this area is \$623 per dwelling unit. The total payment would be in the amount of \$164,472 (264 units x \$623).

### 6. Is there any other relevant information regarding potential significant impacts of the project?

No, there is no additional information to provide.

Thank you for the opportunity to answer your questions regarding this project and its impact on library services. If you have any questions or need additional information please contact me at (562) 940-9455.

Sincerely,

Mi bile Mathine

Michele Mathieu Administrative Assistant

:mm

c: Margaret Donnellan Todd, County Librarian David Flint, Assistant Director Josie Reyes, Regional Administrator

From:	"LARRY FREISE" <lfreise@avhsd.org></lfreise@avhsd.org>
To:	<shack@rbf.com></shack@rbf.com>
Date:	1/17/03 11:36AM
Subject:	Responses to the questionnaire

Good morning. Attached as a Word document are the responses to the questionnaire about the anticipated impact to high schools of the North Downtown Neighborhood Revitalization Transit Village Plan for Lancaster.

Right click the attachment and select 'Open' to view the document in its native program.

Dr. Larry M. Freise Coordinator of Attendance Antelope Valley Union High School District

#### SCHOOL FACILITIES QUESTIONNAIRE

1. Please indicate the name and location of schools which are available to serve the project area.

Antelope Valley High School (AVHS) located at 44900 North Division Street, Lancaster, 93534.

2. What is the current enrollment of each school in the vicinity of the project, and what is the distance of the school from the project area?

Enrollment effective October 2, 2002, was 2562 students in grades 9-12. The school is approximately  $\frac{3}{4}$  of a mile from the center of your planned project.

#### 3. What are the student generation rates for the proposed project? Will new facilities be required?

Previous studies have shown that new residential construction generates .323 high school aged students per single family residential unit. Yield for multi-family apartment and condominium units is .062 and .132 students per unit, respectively. It is anticipated that new facilities at the school will not be required due to your project, as long as the total number of new units constructed in addition to existing units and demolished units does not exceed the current number of units.

4. In consideration of AB 2926, are there any assessment fees or other required or recommended mitigation measure for the project?

The district has imposed a Level II developer fee on all new single and multi-family units constructed in the district. That fee is currently \$1.29 per square foot.

#### 5. Is there any other relevant information regarding significant project impacts?

Currently, AVHS is under capacity. It is anticipated that its eligible population will grow by 1500 to 2000 students in the next 7 years. The district is investigating the possibility of opening a new comprehensive high school is east Lancaster. Adjustment of attendance boundaries for this new school will have an unknown impact on the population of AVHS. The district generally populates its comprehensive schools with 2800 to 3000 students.

6. Do you anticipate that project implementation would result in the need for physical additions to your agency (i.e., construction of new school facilities)?

This surely depends on the number of new residential units created beyond what already currently exists. In general, for every 100 new housing units approximately 33 students will be generated, requiring one additional classroom be added to the campus.

### **City of Lancaster**

44933 North Fern Avenue Lancaster, California 93534-2461 661-723-6000

January 17, 2003

Starla Hack, Environmental Analyst RBF Consulting Post Office. Box 57057 Irvine, California 92619-7057

Re: North Downtown Neighborhood Revitalization Transit Village Plan Environmental Impact Report NAME AND ATTEN OF THE

Frank C. Roberts Mayor

Bishop Henry W. Hearns Vice Mayor

> Jim Jeffra Council Member

Ed Sileo Council Member

Andrew D. Visokey Council Member

James C. Gilley City Manager

Dear Ms. Hack:

The following information is provided in response to the questionnaires the City received relative to the subject development.

#### Sewer Service Questionnaire.

- 1. There is an existing network of sewer mains serving the subject area. The sewer line vary is size from 8 inch mains to a 15 inch trunk sewer in Avenue I. Enclosed is an index map showing the location of the existing sewer system.
- 2. The proposed sewage flow and existing capacity will be determined by a sewer area study provided as part of the Infrastructure Study to be completed by RBF
- 3. Connection charges in accordance with Section 13.08.030 of the Lancaster Municipal Code will be required at the time of permit issuance.
- 4. There may be an increase in the amount of sewage produce by the overall project, but the existing system should be able to handle additional flows. This question can be more fully addressed once the sewer area study and infrastructure study is completed.
- 5. Los Angeles County Sewer Maintenance District 14 can provide a response to this question.
- 6. None at this time.

#### Drainage Facility Questionnaire.

1. There is an existing storm drain in Avenue I, between Sierra Highway and Amargosa Creek. This drain is part of the City's Master Plan of Drainage and has been designed to handle the anticipated runoff from the subject area. Enclosed is a portion of the Master Plan of Drainage, which indicated two additional drains that will need to be installed in order to complete the master planned facilities within the subject area.

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### City of Lancaster

RBF Consulting January 17, 2003 Page 2

- 2. The current capacity of the basin is 560 acre feet.
- 3. The construction of the storm drains identified in the Master Plan of Drainage will mitigate the impact to the drainage system.
- 4. The projects within the subject area will be subject to the payment of the drainage impact fee identified in Sections 13.04.050 and 13.04.090 of the Lancaster Municipal Code.
- 5. The proposed drainage facilities would be constructed within road rights-of-way and would not cause significant environmental effects. The infrastructure study may identify additional drainage facilities required based on hydrology and hydraulic studies.

Sincerely,

Neil K. Hudson Assistant Public Works Director/City Engineer

CSW:jzs

Enclosures: Sewer Index Map Master Plan of Drainage Sheet



Lancaster School District

44711 NORTH CEDAR AVENUE, LANCASTER, CALIFORNIA 93534-3210

(661) 948-4661 FAX (661) 942-9452

STEPHEN J. GOCKE, PH.D. SUPERINTENDENT

BOARD OF TRUSTEES Keith Giles Merle Kleven John L. Miller Greg Tepe Richard T. White

January 21, 2003

RBF Consulting 14725 Alton Parkway Irvine, CA 92616-2027

Gentlemen:

In response to your questionnaire regarding the impact of the City of Lancaster Transit Village project on our schools, we submit the following information.

Children living in the target area attend Desert View Elementary School (grades K-5) and Park View Middle School (grades 6-8). Enrollment is currently 1019 at Desert View and 1245 at Park View. A map is enclosed showing school locations.

All 17 schools in the Lancaster School District are on a multi-track year-round calendar to accommodate our 15,628 students. In the last 18 months, we have built and opened a middle school and an elementary school and currently have one elementary school under construction. The Lancaster School District has experienced steady growth over the past several years and projects growth to continue. The estimated student generation rate for the City's proposed project is .5 students per house. Our AB 2926 residential developer fee rate is currently \$2.69 per square foot.

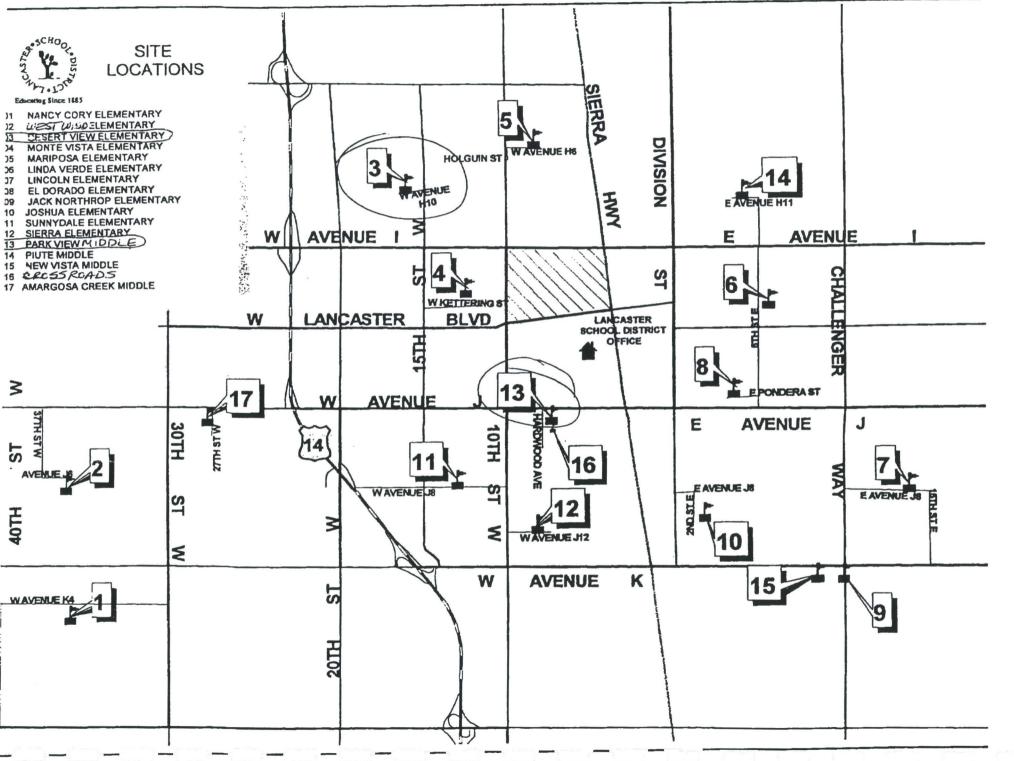
We do not anticipate that the implementation of this project will have any significant impact on our District or result in the need to build new school facilities.

Sincerely,

Carolyn Chender

Carolyn C. Sender Executive Secretary to the Superintendent

cb (City/RBFproject) Enc.



Jan 21 03 02:09p

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### **City of Lancaster**

44933 North Fern Avenue Lancaster, California 93534-2461 661-723-6000



Frank C. Roberts Mayor

Bishop Henry W. Hearns Vice Mayor

> Jim Jeffra Council Member

Ed Sileo Council Member

Andrew D. Visokey Council Member

James C. Gilley City Manager

Starla Hack, Environmental Analyst RBF Consulting Post Office Box 57057 Irvine, California 92619-7057

Re: Lancaster North Downtown Neighborhood Revitalization Transit Village Plan Environmental Impact Report

Dear Ms. Hack:

January 21, 2003

The following information is provided in response to the Roadway Maintenance Questionnaire the City received relative to the subject development.

- 1. We do not anticipate any significant impacts from the project on current roadway maintenance around the project area.
- 2. Not applicable.
- 3. None.

If you have any questions or require further information. you can contact me at (661) 723-6044.

Sincerely,

Neil K. Hudson Assistant Public Works Director/City Engineer

jzs

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Lancaster School District

44711 NORTH CEDAR AVENUE, LANCASTER, CALIFORNIA 93534-3210

(661) 948-4661 FAX (661) 942-9452

STEPHEN J. GOCKE, PH.D. SUPERINTENDENT BOARD OF TRUSTEES Keith Giles Merle Kleven John L. Miller Greg Tepe Richard T. White

January 21, 2003

RBF Consulting 14725 Alton Parkway Irvine, CA 92616-2027

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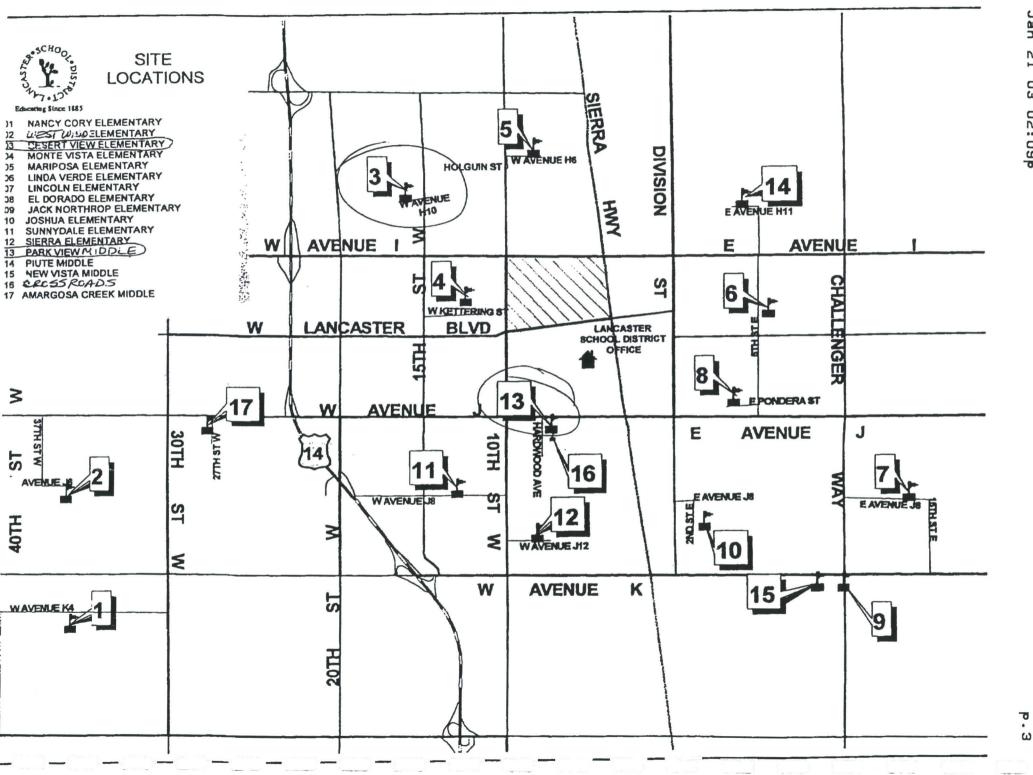
We do not anticipate that the implementation of this project will have any significant impact on our District or result in the need to build new school facilities.

Sincerely,

arolyn Chender

Carolyn C. Bender Executive Secretary to the Superintendent

cb (City/RBFproject) Enc.



Jan N -23 960:20

44933 North Fern Avenue Lancaster, California 93534-2461 661-723-6000



Frank C. Roberts Mayor

Bishop Henry W. Hearns Vice Mayor

> Jim Jeffra Council Member

Ed Sileo Council Member

Andrew D. Visokey Council Member

James C. Gilley City Manager

Starla Hack, Environmental Analyst **RBF** Consulting Post Office Box 57057 Irvine, California 92619-7057

Lancaster North Downtown Neighborhood Revitalization Transit Village Plan Environmental Re: Impact Report

Dear Ms. Hack:

January 21, 2003

The following information is provided in response to the Roadway Maintenance Questionnaire the City received relative to the subject development.

- 1. We do not anticipate any significant impacts from the project on current roadway maintenance around the project area.
- 2. Not applicable.
- 3. None.

If you have any questions or require further information. you can contact me at (661) 723-6044.

Sincerely,

Neil K. Hudson Assistant Public Works Director/City Engineer

jzs

RECEIVED JAN 2-3 2003 RBF CONSULTING



**JAMES A. NOYES, Director** 

### **COUNTY OF LOS ANGELES**

#### DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE REFER TO FILE: W-0

Ms. Starla Hack, Environmental Analyst RBF Consulting 14725 Alton Parkway Irvine, CA 92618-2027 RECEIVED JAN 3 0 2003 RBF CONSULTING

Dear Ms. Hack:

January 22, 2003

#### LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY NORTH DOWNTOWN NEIGHBORHOOD REVITALIZATION TRANSIT VILLAGE PLAN ENVIRONMENTAL IMPACT REPORT INFORMATION

Please find our response to your questionnaire enclosed.

If you have any questions, please contact Mr. George Papik at (626) 300-3349.

Very truly yours,

JAMES A. NOYES Director of Public Works

WBRIAN D. HOOPER Assistant Deputy Director Waterworks and Sewer Maintenance Division

GMP:Ib ww3249

Enc.

#### WATER SERVICE QUESTIONNAIRE RESPONSES

1. What is the current and projected water capacity for the District; annual use in acre-feet, daily flow in CFS, and peak demand in MGD?

Usage Units	2001	<u>2010</u>	2020
acre-feet/year CFS	45,800 63.3	109,400 151.1	132,200 182.6
MGD	40.9	97.7	118.0

2. What is the projected water demand for the project area based on the information provided?

Water demand will be determined for each component as it is developed within the project area based roughly on the following:

- Residential- 1,500 gpd/dwelling unit
- Heavy commercial/industrial- 3,000 gpd/acre
- Light commercial- 2,000 gpd/acre
- 3. Please indicate any existing facilities on/near the project area.

See Exhibits 1A, 1B, 1C, and 1D.

4. What is the current rate of local groundwater extraction and existing groundwater quality? Will the proposed project have an impact on groundwater quality?

Groundwater extraction for 2001 was 18,600 acre-feet. Water quality information is contained in the 2001 Annual Water Quality Report for the Los Angeles County Waterworks District No. 40, Region 4, Lancaster, which encompasses the project area (see Exhibit 2). The proposed project is not expected to have any impact on groundwater quality.

5. Will the proposal require new facilities or additions to existing facilities? If so, please list/summarize any changes.

Additional water facilities such as water mains, fire hydrants, backflow prevention devices, and meters will be required. The specific facilities and locations will be determined as each component of the project is developed.

6. Do you have any required assessment fees or other required or recommended mitigation measures for project impacts?

No.

7. According to SB901 requires a "water supply assessment" be provided by the affected water agency for incorporation into the EIR. As such, please identify whether the demand created by the proposed project has been considered in your agency's most recently adopted water management plan. The assessment should indicate whether the water demand associated with the proposed project can be served by your agency's supplies available during "normal, single-dry, and multiple-dry water years," in addition to the demand for water from existing and other planned uses.

As you are aware, SB610 revised sections of the water code were addressed in SB901. One of those sections revised defined "projects" requiring "water supply assessments." This project does not seem to meet the revised definition of a "project." However, a copy of our most recent Urban Water Management Plan is on file with the City of Lancaster and may be so referenced.

8. Does your agency have sufficient water supplies available to serve the project area from existing entitlement and resources or are new or expanded entitlements needed?

We have sufficient water supplies to meet the demands of the proposed project provided that the water service conditions set at the time each component is developed are met. No additional water entitlements are required for the proposed project.

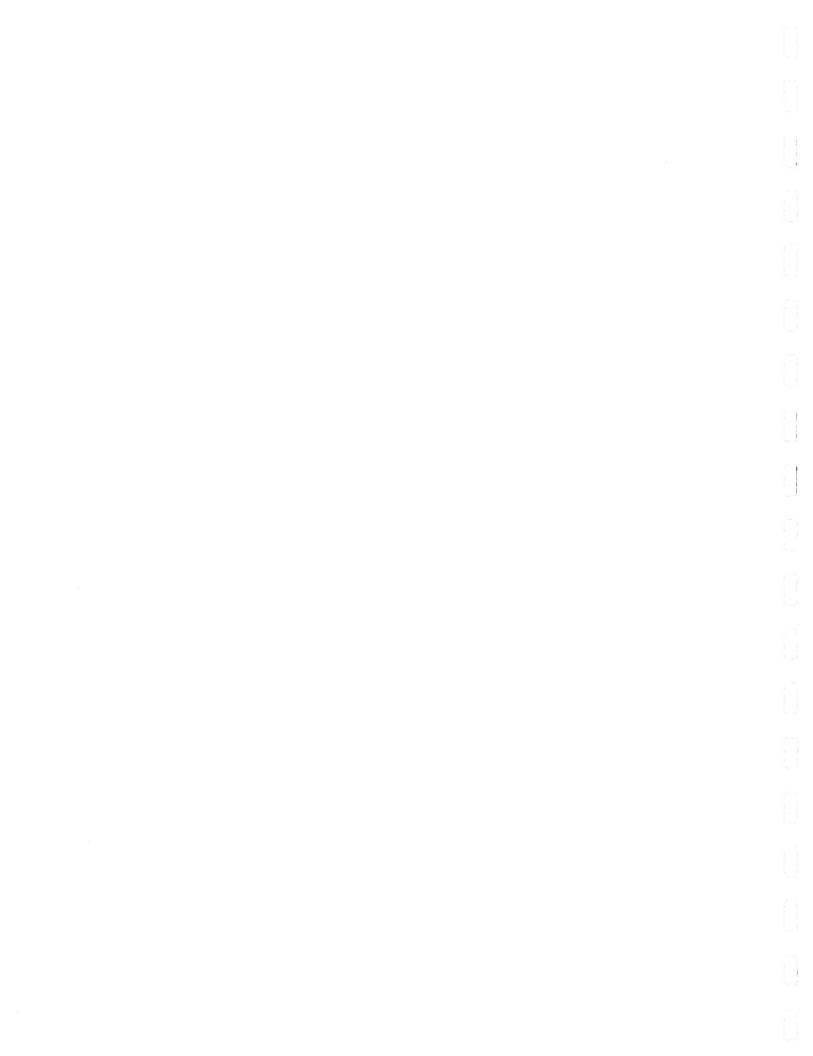
9. Is there any other relevant information regarding potential significant effects of the project?

Water will be available to serve the project upon satisfaction of conditions set for each component of the project and payment of all applicable fees. Component service conditions will be set upon request as each component is developed.

#### GMP:lb

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Enc.





February 19, 2003

RBF Consulting Starla Hack 14725 Alton Pkwy Irvine, CA 92618-2027

#### the shift of the second second station and the productive production of a second second second second second se

Dear Mrs. Hack:

This is to advise that the subject property is located within the service territory of the Southern California Edison Company (SCE) and that the electrical loads of the project are within parameters of projected load growth which SCE is planning to meet in this area.

Our total system demand is expected to continue to increase annually; however, excluding any unforeseen problems, our plans for new distribution resources indicate that our ability to serve all customers' loads in accordance with our rules and tariffs will be adequate during the decade of the 2000's.

Current conservation efforts on the part of SCE customers have resulted in energy savings. Optimization of conservation measures in this project will contribute to the overall energy savings goal.

If you have any additional questions, please feel free to call me at (661) 726-5627.

Sincerely,

aim Gumps Jim Jump

Customer Service Planner

