Draft
Supplemental Environmental Impact Report
SCH No. 1993101036

LANCASTER LANDFILL AND RECYCLING CENTER

CONDITIONAL USE PERMIT NO. 03-170

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

December 2006

DRAFT
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
LANCASTER LANDFILL AND RECYCLING CENTER
SCH NO. 1993101036

CONDITIONAL USE PERMIT NO. 03-170

Prepared for:

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, CA
Contact: Christina Tran (213) 974-6461

Prepared by:

Keeton Kreitzer Consulting
17291 Irvine Boulevard
Tustin, CA 92780
Contact: Keeton K. Kreitzer, Principal (714) 665-8509

December 2006

LANCASTER LANDFILL AND RECYCLING CENTER CONDITIONAL USE PERMIT

TABLE OF CONTENTS

Page

1.0 EXECUTIVE SUMMARY 1-1
1.1 Description of the Proposed Project 1-1
1.2 Alternatives 1-3
1.3 Areas of Controversy 1-4
1.4 Issues to be Resolved 1-4
1.5 Impact Summary Table 1-4

2.0 INTRODUCTION 2-1
2.1 Purpose of the Draft Supplemental EIR 2-1
2.2 Methodology 2-4
2.3 Format of the Draft Supplemental EIR 2-6

3.0 PROJECT DESCRIPTION 3-1
3.1 Project Location 3-1
3.2 Environmental Setting 3-1
3.3 History and Evolution of the Project Site 3-24
3.4 Project Need 3-24
3.5 Description of the Proposed Project 3-33
3.6 Project Objectives 3-34
3.7 Project Processing Requirements and Requested Entitlements 3-35

4.0 ENVIRONMENTAL ANALYSIS 4-1
4.1 Traffic and Circulation 4.1-1
4.1.1 Existing Conditions 4.1-2
4.1.2 Significance Criteria 4.1-9
4.1.3 Potential Impacts 4.1-9
4.1.4 Mitigation Measures 4.1-30
4.1.5 Level of Significance After Mitigation 4.1-32

4.2 Air Quality 4.2-1
4.2.1 Existing Conditions 4.2-1
4.2.2 Significance Criteria 4.2-6
4.2.3 Potential Impacts 4.2-7
4.2.4 Mitigation Measures 4.2-12
4.2.5 Level of Significance After Mitigation 4.2-14

4.3 Noise 4.3-1
4.3.1 Existing Conditions 4.3-1
4.3.2 Significance Criteria 4.3-4
4.3.3 Potential Impacts 4.3-5
4.3.4 Mitigation Measures 4.3-9
4.3.5 Level of Significance After Mitigation 4.3-9

Page

4.4 Water Quality/Water Demand 4.4-1
4.4.1 Existing Conditions 4.4-1
4.4.2 Significance Criteria 4.4-5
4.4.3 Potential Impacts 4.4-5
4.4.4 Mitigation Measures 4.4-9
4.4.5 Level of Significance After Mitigation 4.4-10

5.0 IMPACTS FOUND NOT TO BE SIGNIFICANT 5-1

6.0 UNAVOIDABLE ADVERSE IMPACTS 6-1

7.0 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES 7-1

8.0 GROWTH INDUCING IMPACTS 8-1

9.0 CUMULATIVE IMPACTS 9-1

10.0 PROJECT ALTERNATIVES 10-1
10.1 Introduction 10-1
10.2 Environmentally Superior Alternative 10-2
10.3 Analysis of Alternatives 10-2
10.4 Summary of Project Objectives 10-9

11.0 ORGANIZATIONS AND PERSONS CONSULTED 11-1

12.0 REFERENCES 12-1

13.0 GLOSSARY OF ACRONYMS 13-1

APPENDICES

A. Initial Study/Notice of Preparation/NOP Distribution List/NOP Comments
B. Traffic Analysis
C. Air Quality Analysis
D. Noise Analysis
E. EIR 1993101036 Mitigation Monitoring and Reporting Program

LANCASTER LANDFILL AND RECYCLING CENTER CONDITIONAL USE PERMIT

LIST OF FIGURES

Page

3-1 Regional Location Map 3-2
2-2 Vicinity Map 3-3
3-3 Site Boundaries Map 3-4
3-4 County-Wide General Plan Land Use Map 3-11
3-5 Antelope Valley Area Wide Land Use Map 3-12
3-6 Lancaster General Plan Land Use Map 3-17
3-7 Los Angeles County Zoning Map 3-21
3-8 U.S.G.S. Topographic Map 3-22
3-9 Lancaster Landfill and Recycling Center Site Plan 3-25

4.1-1 Study Area 4.1-3
4.1-2 Existing Roadway and Intersection Physical Characteristics 4.1-4
4.1-3 Existing Year 2005 a.m. Peak Hour Volumes 4.1-6
4.1-4 Existing Year 2005 p.m. Peak Hour Volumes 4.1-7
4.1-5 Project Traffic Distribution Pattern Without Avenue F Extension 4.1-13
4.1-6 Project Traffic Distribution Pattern With Avenue F Extension 4.1-14
4.1-7 Project-Generated a.m. Peak Hour Traffic Volumes Without Avenue F Extension 4.1-15
4.1-8 Project-Generated p.m. Peak Hour Traffic Volumes Without Avenue F Extension 4.1-16
4.1-9 Project-Generated a.m. Peak Hour Traffic Volumes With Avenue F Extension 4.1-17
4.1-10 Project-Generated p.m. Peak Hour Traffic Volumes With Avenue F Extension 4.1-18
4.1-11 Year 2006 Cumulative Base a.m. Peak Hour Traffic Volumes 4.1-21
4.1-12 Year 2006 Cumulative Base p.m. Peak Hour Traffic Volumes 4.1-22
4.1-13 Year 2006 Cumulative Plus Project a.m. Peak Hour Traffic Volumes Without Avenue F Extension 4.1-24
4.1-14 Year 2006 Cumulative Plus Project p.m. Peak Hour Traffic Volumes Without Avenue F Extension 4.1-25
4.1-15 Year 2006 Cumulative Plus Project a.m. Peak Hour Traffic Volumes With Avenue F Extension 4.1-26
4.1-16 Year 2006 Cumulative Plus Project p.m. Peak Hour Traffic Volumes With Avenue F Extension 4.1-27

4.3-1 Noise Monitoring Locations 4.3-2
4.3-2 Typical Equipment Noise Generation Levels 4.3-7

4.4-1 Groundwater Well Locations 4.4-3
4.4-2 Environmental Monitoring and Control Systems 4.4-6

LANCASTER LANDFILL AND RECYCLING CENTER CONDITIONAL USE PERMIT

LIST OF TABLES

Page

1-1 Summary of Impacts, Mitigation Measures and Level of Significance After Mitigation 1-5

2-1 List of Potential Responsible and Trustee Agencies – Project Approvals 2-3

3-1 Current Employees 3-8
3-2 On-Site Equipment 3-8
3-3 Los Angeles County General Plan Policy Plan Consistency Analysis 3-13
3-4 Antelope Valley Area Wide Community Plan Policy Plan Consistency Analysis 3-15
3-5 Siting Element Consistency Analysis 3-18
3-6 Los Angeles County Waste Generation 3-27
3-7 In-County Landfill and Refuse-to-Energy Facilities 3-28

4.1-1 Existing Intersection Peak Hour LOS 4.1-5
4.1-2 Existing Freeway Mainline Levels of Service 4.1-8
4.1-3 Existing (2005) Pavement Integrity 4.1-9
4.1-4a Projected Average Tonnage Increase 4.1-10
4.1-4b Projected Peak Tonnage Increase 4.1-11
4.1-5 Project Trip Generation Estimates 4.1-12
4.1-6 Year 2006 Cumulative (Without Project) Intersection Peak Hour LOS 4.1-19
4.1-7 Year 2006 Cumulative Plus Project Intersection Peak Hour LOS 4.1-21
4.1-8 2006 Cumulative (Without Project) Freeway Mainline Levels of Service 4.1-28
4.1-9 Year 2006 SR-14 Freeway Mainline Levels of Service 4.1-29
4.1-10 2006 Pavement Integrity Analysis 4.1-31

4.2-1 Ambient Air Quality Standards 4.2-3
4.2-2 Antelope Valley Monitoring Summary 4.2-5
4.2-3 Mojave Desert AQMD Operational Emissions Thresholds 4.2-7
4.2-4 Existing and Future Equipment and Personnel 4.2-8
4.2-5 Project-Related Emissions (lbs/day) 4.2-9
4.2-6 Tier 2 TAC Analysis 4.2-11
4.2-7 TAC Analysis (Grinder) 4.2-12

4.3-1 Ambient Noise Levels 4.3-3
4.3-2 Los Angeles County Noise Standards 4.3-4
4.3-3 Traffic Noise Impacts (dB CNEL) 4.3-6
4.3-4 Los Angeles County Noise Compliance Standards 4.3-8
4.3-5 "Worst Case" Noise Envelope 4.3-8

9-1 List of Cumulative Projects 9-3

10-1 Project Alternatives Objectives Attainment 10-10
10-2 Summary of Impacts – Project Alternatives 10-11

CHAPTER 1.0
EXECUTIVE SUMMARY

1.1 Description of the Proposed Project

1.1.1 Project Location

Lancaster Landfill and Recycling Center (LLRC) encompasses 276-acres in unincorporated Los Angeles County. The LLRC property is located approximately two miles northeast of the City of Lancaster in unincorporated Los Angeles County in a larger area bounded by Division Street on the west, Avenue "F" on the north and Avenue "G" on the south; 10th Street East divides the Eastern Area from the remainder of the landfill property. The LLRC is composed of the current active area (82 acres), the Western Area (62 acres), the Eastern Area (112 acres), and the 20-acre portion of the property that accommodates the landfill operation facilities.

1.1.2 Existing Permit Conditions

Under the approved Solid Waste Facilities Permit (SWFP) and Conditional Use Permit (CUP 93-070-(5) issued May 13, 1998), the LLRC is currently permitted to accept 1,700 tons per day (tpd) of municipal solid waste (MSW) for disposal. An additional unspecified quantity of soil, green waste, and recyclable and beneficial use materials is also accepted at the LLRC. In addition, the LLRC may also accept up to 10 tpd of non-hazardous sludge and other non-hazardous materials, including non-friable asbestos-containing waste, non-hazardous contaminated soils, wood waste, agricultural waste, and other bulky items (i.e., "white goods"). Only non-hazardous waste is accepted at the LLRC because of the site's Class III MSW designation. A calibrated radiation detector is operated at the scales to detect radioactive materials. The permitted disposal area within the LLRC encompasses 209 acres. The maximum approved elevation of the LLRC is 2,400 feet above mean sea level (amsl). Operating hours of the LLRC extend from 5:00 a.m. to 10:00 p.m. Monday through Saturday. The estimated closure date of the LLRC is 2031 based on the current rate of disposal.

1.1.3 Project Description

The project applicant, Waste Management of California, Inc. (WMI), requests amendment of the existing Conditional Use Permit approved on May 13, 1998 by the County of Los Angeles for the subject property that allows the current use of the site. The proposed amendment, if approved, will increase the allowable daily volume of municipal solid waste (MSW) for disposal from 1,700 tons per day (tpd) that is currently permitted to 3,000 tpd. In addition, an estimated 1,600 to 2,800 tpd of soil, green/wood waste, and recyclable and beneficial use materials would also be accepted at the LLRC. The LLRC would process up to 500 tpd of greenwood waste received at the landfill. The proposed project does not include a horizontal expansion of the permitted landfill footprint and would result in a reduction in the expected life of the facility. At the present time, closure of the LLRC is anticipated for 2031 (i.e., approximately 27 years); however, project implementation would result in a closure date of 2019 as the maximum permitted level (i.e., msl) would be reached sooner. In addition to new Conditional Use Permit, the Solid Waste Facilities Permit (SWFP) must also be revised to reflect the proposed increase in daily refuse intake at the LLRC. The Los Angeles County Department of Health Services (Local Enforcement Agency) must approve the Revised SWFP. No other modifications are proposed to the LLRC, which will continue to be operated as a Class III facility. Finally, all of the mitigation measures prescribed in the 1997 EIR (SCH No. 1993101036) and related conditions remain applicable to the LLRC and will continue to be implemented in accordance with the approved permit(s).

1.1.4 Project Phasing

Implementation of the proposed project does not include any expansion of the existing facilities and, therefore, does not require development phasing. The applicant is proposing only to increase the daily refuse intake from 1,700 tpd to 3,000 tpd. No other changes to the existing permit are proposed. If approved by the County of Los Angeles, it is anticipated that the applicant would increase the daily operations to accept 3,000 tpd immediately, beginning in 2006, upon issuance of the SWFP.

Project implementation will not change the base excavation plan (i.e., phasing plan) prepared for the landfill. Based on that plan, the following completion of the existing landfill area, landfilling activities would occur in the Western Area (Fill Phases I and II), followed by Fill Phase III that would occur over the top of Fill Phases I and II and the existing landfill area in order to bring the area up to final grades. Fill Phases IV through VIII will occur in the Eastern Area, beginning in the western limits of that area and proceeding in an easterly direction to the eastern limits of the Eastern Area. The final phase will be Fill Phase IX, which will occur over the top of the Eastern Area prior to closure of the LLRC.

1.1.5 Project Objectives

EIR SCH No. 1993101036 listed several general objectives of the County of Los Angeles for solid waste management; however, those objectives were superseded by the June 1997 Los Angeles County Countywide Siting Element (CSE), which are identified below.

- To protect the health, welfare, and safety of all citizens by addressing the disposal need of the 88 cities and County unincorporated communities in Los Angeles County during the 15-year planning period through development of environmentally safe and technically feasible disposal facilities for solid waste which cannot be reduced, recycled, or composed.

  This goal incorporates policies to:

  - Enhance in-County disposal capacity
  - Facilitate utilization of out-of-County/remote disposal sites

- To foster the development of transformation and other innovative solid waste disposal technologies as alternatives to land disposal.

- to protect the economic well-being of Los Angeles County by ensuring that the cities and the County unincorporated communities are served by an efficient and economical public/private solid waste disposal system.

- To provide siting criteria that considers and provides for the environmentally safe and technically feasible development of solid waste disposal facilities.

- To reduce the volume (tonnage) of solid waste requiring land disposal or transformation by continuing to implement and expand source reduction, recycling, composting, and public education programs.

- To conserve Class III landfill capacity through diversion of inert waste, disposal of inert waste at unclassified landfills, increased waste disposal compaction rate, and the use of green waste and other appropriate materials for landfill daily cover.

- To promote and encourage waste diversion activities at disposal facilities.

- to promote adequate markets for recycled materials and compose products.

The objectives of the prior landfill expansion addressed the need to provide additional landfill capacity for the County with a minimal amount of environmental impact (e.g., increase landfill capacity in the County without producing groundwater quality impacts caused by landfill leachate, etc.). The objectives for the proposed project identified below are intended to supplement those objectives and include:

- Authorize daily refuse handling capacity at an existing in-county landfill to accommodate future projected population growth and waste load shifting within Los Angeles County.
- Provide a regional resource within the Antelope Valley area that is available for both local and County waste disposal for at least 15 years.
- Decrease the amount of dependence on out-of-county waste disposal and long-haul options of waste by increasing in-county disposal options, and thereby avoiding adverse regional air quality and traffic impacts.
- Minimize the impacts of solid waste disposal through a well-engineered and environmentally sound operation.
- Dispose of refuse in an existing landfill and relatively isolated area thus efficiently utilizing land space.

1.2 Alternatives

1.2.1 Summary of Alternatives

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, and to evaluate the comparative merits of the alternatives. Chapter 10 sets forth potential alternatives to the proposed project and evaluates them as required by CEQA. As described in Chapter 10 of EIR SCH No. 1993101036, which was prepared for the lateral expansion of the LLRC, several alternatives were evaluated, including: No Project (i.e., no lateral expansion) and several alternative project locations, including rail haul to remote locations both in and out of California. Several alternative development scenarios are also identified and evaluated in this supplemental EIR as a means of reducing potentially significant impacts associated with implementation of the proposed project (i.e., increasing the daily capacity of the LLRC). These alternatives include several other potentially feasible development alternatives, including:

- No Project/No Development (Existing Landfill Operations)
- Smaller Increase in Daily Permitted Capacity (2,350 tpd)
- Increase Daily Maximum Capacity at Antelope Valley Landfill

1.2.2 Environmentally Superior Alternative

Chapter 10 describes the criteria that were used to select those alternatives for detailed analysis and to screen others from further detailed consideration. CEQA also requires that the EIR identify the environmentally superior alternative among all of the alternatives considered, including the proposed project. It is important to note that although project implementation will result in potentially significant impacts (e.g., air quality), no significant unavoidable adverse impacts will occur. Although the alternative that would reduce the increase in daily volume to 2,350 tons per day would reduce the number of daily vehicular trips as well as the air pollutant discharges and increase in noise, similar mitigation would be required to ensure that the impacts were reduced to a less than significant level. Nonetheless, based on the comparative analysis of alternatives provided in Chapter 10, the Smaller Increase in Daily Volume is considered to be environmentally superior in that its implementation would result in the least adverse

environmental impacts compared to other alternatives as well as the proposed project. However, most or all of the mitigation measures prescribed in Chapter 4 of Draft EIR must still be implemented with this alternative.

1.3 Areas of Controversy

An Initial Study was prepared, which identified only four issues as the focus of the Draft Supplemental EIR. The analysis presented in the Draft Supplemental EIR evaluates potential project-related impacts to traffic, noise, air quality and hydrology and water quality as identified in the initial study conducted by the County of Los Angeles. No other areas of potential controversy were identified during the public comment period. A supplement to a previously prepared EIR need contain only the information necessary to make the previous EIR adequate for the project as revised. (CEQA Guidelines, § 15163, subd. (b).) The decision-making body must consider the previous EIR as revised by the supplemental EIR when deciding on permit approval. (CEQA Guidelines, § 15163, subd. (e).)

1.4 Issues to be Resolved

As indicated in Chapter 3.0 (Project Description) of the Draft Supplemental EIR, the applicant is requesting only to increase the volume of refuse that can be accepted at the Lancaster Landfill and Recycling Center on a daily basis. No new physical changes to the approved Landfill (Closure) Plan are proposed (e.g., change in horizontal footprint) that would necessitate the resolution of any issues related to the physical environment. The applicant must receive approval of the Conditional Use Permit (No. 03-170), replacing the existing CUP, from the County of Los Angeles, and approval of the Revised SWFP from the County of Los Angeles, Department of Health Services as the Local Enforcement Agency ("LEA") recognized by the CIWMB. After approval by the LEA and concurrence by the CIWMB, the revised SWFP may be issued.

1.5 Impact Summary Table

Table 1-1 summarizes the potential adverse effects of the proposed project and provides a summary of the potential impacts and mitigation measures, and summarizes the potential effects before and after mitigation. Each environmental resource area covered in the main text is summarized. Also, impacts found to be potentially significant are listed along with the proposed mitigation measures. Table 1-1 also includes the original mitigation measures prescribed in EIR SCH No. 1993101036 prepared for the lateral expansion of the LLRC that still apply to the proposed project. The residual impact after application of mitigation measures is also indicated for each significant impact.

Table 1-1

Summary of Impacts, Mitigation Measures and Level of Significance After Mitigation
Lancaster Landfill & Recycling Center

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Transportation/Circulation	
Project implementation will not result in any significant traffic impacts at any of the key intersections. All of the intersections are forecast to operate at acceptable levels of service based on the County Plan.	No impacts are anticipated and no mitigation measures are necessary.	Less than Significant Impact
Project-generated truck traffic impact the pavement integrity of Division Street between Avenue F and Avenue G (without the Avenue F extension).	Prior to an increase in operation, the applicant shall fully improve the pavement and thickening of the base/sub base on the following streets: (1) 10th Street East between Avenue F and Avenue G; (2) Avenue F between Division Street and 10th Street West; (3) Division Street between Avenue and F and Avenue G; (4) 10th Street West Between Avenue and F and Avenue G; and (5) Avenue G between 100 feet west of the southbound SR-14 on/off ramps and 10th Street East. If Avenue F between Sierra Highway and Division Street is constructed, the project shall also be responsible to improve Avenue F between 100 feet west of the southbound SR-14 on/off ramps and Sierra Highway. As part of the proposed Project, the LLRC intends to implement the following program to help maintain a clean road surface on the County roadway supporting ingress and egress for landfill traffic: ▪ Install "rumble grates" on the access road within the site property between the exit scale and driveway leading to East Avenue F (to remove loose material from vehicles prior to exiting the site). ▪ Wash down the pavement surface of the onsite exit road as well as East Avenue F, between Division St and Challenger Way, on a weekly basis. ▪ Conduct road sweeping twice per month on East Avenue F, between Division St and Challenger Way. **Mitigation Measure prescribed in EIR SCH No. 1993101036 is currently being implemented and will continue to apply to the LLRC if applicable as determined by DPW:** *Contribute on a fair share pro-rata basis to the cost to reconstruct the pavement of Avenue F between Division Street and10th Street East and 10th Street East between Avenue F and Avenue G.*	Less than Significant Impact

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Air Quality	
Project implementation will result in project specific pollutant emissions associated with truck traffic hauling refuse to the site as well as emissions from flares and on-site equipment used in the landfilling process. The increase in both operational and mobile-source emissions will exceed the thresholds established by the Antelope Valley AQMD for NOx and PM10.	No feasible mitigation measures are available to reduce the potentially significant NOx and PM10 emissions resulting from project implementation. No additional mitigation measures beyond those prescribed in EIR SCH No. 1993101036 are necessary (see below).	Significant Unavoidable Impact
Increased MSW intake rates will increase the levels of daily LFG emissions; however, the resulting ROG emissions will be less then significant when based on future operations.	No impacts are anticipated and no mitigation measures are required.	Less than Significant Impact
Tier 2 screening risk conducted for the landfill gas emissions concluded that there is no significant public health risk from TAC emissions. Similarly, the TAC analysis conducted for the grinder operations also concluded that both the acute and chronic hazard indices for the grinder are below the significance thresholds. Therefore, no significant health risk impacts are anticipated.	No impacts are anticipated and no mitigation measures are required.	Less than Significant Impact
The incremental addition of both mobile- and construction-related emissions associated with the increase in daily capacity will incrementally contribute to the cumulative adverse non-attainment conditions that currently exist in the air basin for ozone and particulates.	Although the LLRC must comply with the rules and permit conditions imposed by the AVAQMD, including dust control, etc., no additional feasible measures are available to avoid or substantially reduce all of the air emissions resulting from the proposed increase. **Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC:** *Conduct engine feasibility study to determine whether equipment and vehicles can be powered with engines that meet on-highway standards. Evaluation to include utilization of turbocharged and intercooled diesel engines, and retardation of fuel injection.* *Tune-up and maintain landfill equipment in accordance with manufacturers schedules and specifications.* *Instruct operators and supervisors to report any symptoms of performance which require maintenance.* *Instruct equipment operators to shut down diesel equipment if it is expected to idle for more than 10 minutes.* *Evaluate feasibility of employee ridesharing program.* *Continue existing dust suppression measures on unpaved roads, in borrow areas, and at working face of landfill.*	Significant Unavoidable Impact

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Continue to operate landfill gas collection and combustion system in accordance with governing APCD regulations. *Continue to monitor surface emissions and gas migration as required by the APCD, the LA County Department of Public Works (LACDPW) in LA County Building Code, Section 110.3 and the LEA in CCR, Title 27, as applicable.* *Install landfill gas migration monitoring probes around the perimeter of the expansion areas.* *Conduct regular visual inspections of landfill cover and monitor gas emissions in accordance with governing APCD and CCR, Title 27 regulations.* *Apply daily cover at working face of the landfill.* *In the event that an odor complaint is verified by LEA to be related to the disposal of sludge, LEA may order movement or suspension of sludge disposal operations.*	
	Noise	
Although project-related activities would not exceed the Los Angeles County Noise Ordinance for anticipated site uses, single-event noise may be intrusive. Adopted noise standards would not be exceeded, however. Therefore, operational noise impacts associated with future traffic volumes and on-site activities will be less than significant.	No significant impacts are anticipated and no mitigation measures beyond those prescribed in EIR SCH No. 1993101036 are required (see below). **Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC:** *If residential development has occurred near landfill construction, limit construction hours to 7:00 a.m. to 7:00 p.m. No construction on weekends or Federal holidays.* *As development occurs in new cells, construct berms to limit off-site impacts.* *Tune equipment and maintain equipment noise mufflers.*	Less than Significant Impact

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Water Quality/Water Demand	
The proposed project will not result in any significant impacts from changes in the topographic conditions. Waste will be placed above lined areas and there will be no potential increase in erosion beyond that previously analyzed in the 1997 EIR. Therefore, no significant impacts are anticipated.	Although no significant impacts are anticipated, erosion control measures previously prescribed for the LLRC shall continue to be utilized at the site during landfill operations and closure to minimize the soil loss from the landfill. Excessive soil loss shall be mitigated by limiting the distance water must travel before reaching a channel or other drainage structures and by maintaining a 3:1 ratio. Existing mitigation measures for the LLRC, including, but not limited to, silt fences, bale dikes, wood chips, and sand bags remain adequate under the proposed project. Further, maintenance of the sedimentation basins will be conducted annually and will continue throughout the post-closure maintenance period. Further, current activities to establish interim vegetation on the deck and slope areas of the site will be continued. Subsequent to closure of the LLRC, vegetative materials will be established over the surface of the landfill to serve as the primary erosion control feature. No additional mitigation measures beyond those prescribed in EIR SCH No. 1993101036 are required (see below). **Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC:** *Design and construct leachate control and removal system (LCRS) to consist of collection pipes, collection sumps and liner as described in Figures 5.5-2 and 5.5-3 in Draft EIR.* *Periodic monitoring of surface water quality in accordance with site's existing Storm Water Pollution Prevention Plan (SWPPP).* *Implement a proactive Water Quality Monitoring Program in compliance with State and Federal regulations.* *Decommission existing wells by pressure grouting or by another suitable method prior to landfill development, and strict adherence to the protocols for wells construction mandated by the California Department of Water Resources.*	Less than Significant Impact

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Geotechnical	
	Mtigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Prepare Earthquake Preparedness Plan as part of Emergency Response Plan.* *Design interim slopes not to exceed a gradient of 1.5:1.* *Develop landfill in phases to limit acreage disturbed during each phase.* *Construct peripheral drainage channels around the refuse prism.* *Continue implementation of dust control program.*	
	Flood	
	Mtigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *In phases, construct diversion ditch around expansion area. Construct temporary ditches around each phase. Collect runoff in sedimentation ponds.* *Periodic inspections of surface drainage facilities, vegetated soil cover areas, intermediate fill surfaces and on-site access roads. Daily inspections during periods of high-intensity rainfall.* *Seal cracks caused by settlement in intermediate and final cover resulting from heavy rainfall.* *Design and construct earth-berms and channels to direct runoff away from site.* *Implement phasing plan to promote sheet flow to sedimentation basin for percolation and dust control.* *Implement Phase II drainage plan to promote sheet flow to the northwesterly detention basin. Implement Phase III drainage plan to direct flow to outer perimeter channel.*	

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	In EEA, implement grading plan to direct flow to adjacent excavated cell and southerly channel. Pump water from excavated cells to designated sedimentation basins. *Dedicate a 100-foot wide drainage easement along the east side of future 5th Street East for construction of a flood channel proposed in the Antelope Valley Flood Control and Water Conservation Plan.*	
	Fire Hazard	
	Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Implement measures described in Spill Countermeasure and Control Plan and Emergency Management Plan (required by State in CCR, Title 27) as listed on Pages 5.3-4 and 5.3-5 of Draft EIR.* *Maintain 100-foot wide buffer zone at the perimeter of the expansion areas.* *Implement procedures required by LA County Fire Department Prevention Regulation No. 10 to ensure adequate access and provision and maintenance of facilities.* *Train operations personnel annually in fire prevention, fire extinguisher use and emergency response.* *Remove debris and dust from undercarriages and engine compartments and check for oil and fuel leaks of landfill equipment and vehicles.* *Provide fire extinguishers on all landfill equipment and in the entrance and maintenance facilities.*	
	Biota	
	Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Revegetate completed landfill cells.* *Restrict size of working face of landfill to one acre or less to reduce attraction of unwanted species.*	

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Conduct pre-construction surveys to ensure that no sensitive plant species are found within project boundaries. *Verify whether 0.4 acre desert meadow habitat in northern edge of EEA constitutes a jurisdictional wetland.* *Prior to construction activities in the EEA, perform a botanical survey to establish existing vegetation densities in order to develop revegetation seed mixes.* *Conduct timely surveys to determine the presence or absence of the desert tortoise. If found, coordinate with the CDFG and USFWS in implementing relocation program.*	
	Cultural/Paleontological Resources	
	Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Cease operations if cultural resources re encountered during any phase of construction. If Indian remains encountered, contact Native Indian Advisor of the local tribe as well as County Coroner.* *Retain qualified paleontologist to perform periodic inspections and, if necessary, salvage exposed fossils. The paleontologist shall be allowed to divert or direct grading in the area of an exposed fossil. As necessary, samples shall be collected with fine mesh screens. Implement other measures listed on Page 5.8-10 of Draft EIR.*	
	Visual Qualities	
	Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Utilize berms, where practical, to screen views of working face of the landfill from nearby residential areas.* *Vegetate berms with intermediate vegetative cover.* *Coordinate with County of Los Angeles Department of Parks and Recreation and Antelope Valley Trails, Recreation and Environmental Council (AVTREC) to relocate rural trail currently proposed through the EEA.*	

Potential Impact	Mitigation Measures	Level of Significance After Mitigation
	Environmental Safety	
	Mitigation Measures prescribed in EIR SCH No. 1993101036 are currently being implemented and will continue to apply to the LLRC: *Continue to implement provisions of Special Waste Identification Plan (SWIP) to identify potential sources of hazardous wastes. Maintain signs that indicate that hazardous materials and liquid wastes are not accepted.* *Continue to implement Hazardous Waste Exclusion Program (HWEP) to randomly check loads of incoming waste for hazardous materials.* *Store materials in designated on-site storage area for less than 90 days. Materials to be removed by licensed transporter.* *Continue to utilize a radiation detector at the scale house to detect presence of radioactive materials and prevent their disposal at the site.*	

CHAPTER 2.0
INTRODUCTION AND BACKGROUND

2.1 Purpose of the Draft Supplemental EIR

2.1.1 Authority

This Supplemental Environmental Impact Report (SEIR) was prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000 et seq.). This SEIR assesses the potential impacts associated with the increase in daily refuse volume proposed for the Lancaster Landfill and Recycling Center (LLRC). The County of Los Angeles is the Lead Agency for the proposed project and the attendant new Conditional Use Permit.

An EIR is an informational document prepared pursuant to CEQA. It provides decision-makers, public agencies, and the public in general with detailed information about the potential significant environmental effects of a proposed project. It also lists the ways in which the significant effects of a project might be minimized and addresses alternatives to the project. CEQA requires that an EIR contain at a minimum, certain specific information, including but not limited to a clear, concise project description; environmental settings; discussion of environmental impacts; effects found not to be significant, and cumulative impacts. This information is required pursuant to Sections 15120 through 15132 of the State CEQA Guidelines.

2.1.2 Earlier Environmental Analysis

As permitted by Section 15150 of the CEQA Guidelines, this Draft SEIR has referenced several technical studies, analyses, and reports. Information from the documents that has been incorporated by reference has been briefly summarized in the appropriate section(s) that follow and the relationship between the incorporated part of the referenced document and the Draft EIR has been described. The documents and other sources, which have been used in the preparation of this Draft SEIR, are identified in Chapter 12.0 (Bibliography). In accordance with Section 15150(b) of the State CEQA Guidelines, the location where the public may obtain and review these referenced documents and other sources used in the preparation of the Draft SEIR is also identified in Chapter 12.0.

In addition to the technical studies, the Final EIR prepared for the Lancaster Landfill and Recycling Facility (County Case No. 93070/SCH No. 1993101036) has also been used to prepare the Draft SEIR. As indicated above, the County of Los Angeles certified Final EIR SCH No. 1993101036 in 1997. That document evaluated the potential impacts of LLRC expansion, which included expanding the landfill footprint to include 209 acres; the maximum elevation of the landfill was established at 2,400 feet amsl when the expansion was approved in 1998. Where appropriate and necessary, information contained in that document has been incorporated by reference as permitted by CEQA and the State CEQA Guidelines. The Final EIR for the Lancaster Landfill and Recycling Facility is available at the Los Angeles County Department of Regional Planning for review.

2.1.3 Intended Uses of the Draft EIR

This Supplemental EIR has been prepared pursuant to Section 15163 of the State CEQA Guidelines, which allows a lead agency to prepare a supplement to a previously prepared EIR when ". . . minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation." As previously indicated, in this case, the applicant is proposing only to increase the daily capacity; no other physical changes to the existing landfill are proposed. As a result, the proposed

action will require only minor additional analysis to adequately address the potential impacts of the increase in daily capacity, which is presented in this Supplemental EIR.

Pursuant to the requirements of CEQA, the Draft SEIR is intended to provide information regarding the environmental consequences of, mitigation measures for, and alternatives to, the proposed new Conditional Use Permit and Solid Waste Facility Permit that would allow an increase in daily refuse volume accepted at the landfill to 3,000 tons per day (from the current permitted volume of 1,700 tons per day), which results in an increase of 7,800 tons per week based on a six-day week. It is also meant to facilitate discussions with other agencies regarding implementation of mitigation measures. CEQA is specific about providing disclosure where "[t]he EIR is to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action ... " (Guidelines Section 15300 [d]). CEQA also requires consideration of the whole or entirety of an action. With these guiding principles in mind, the intended uses of this SEIR are to:

- Inform the decision-makers, public, and agencies about the project;
- Analyze the environmental impacts of the (proposed) new Conditional Use Permit and Solid Waste Facility Permit;
- Provide notice to Responsible/Trustee Agencies regarding required permits;
- Incorporate analysis related to the requirements of these laws to allow responsible agencies to make findings pursuant to this SEIR.

Although this Draft SEIR will also be necessarily specific in the depth of analysis (i.e., project-level analysis), this document, along with the supporting existing setting and General Plan and related long-range planning documents, when appropriate, provides environmental documentation for the implementation of the increase in daily and weekly refuse volume (and additional green/wood waste, which is estimated to range from 1,600 tpd to 2,800 tpd) proposed for the Lancaster Landfill. It provides project level environmental documentation that will be used by the County's decision-makers prior to taking an action on the proposed project.

A discretionary project triggering the need for environmental review under CEQA is an action taken by a government agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes or regulations. For this project, the lead government agency is the Los Angeles County and the County Department of Health Services acts as the Local Enforcement Agency designated under State law to approve or deny the revised Solid Waste Facility Permit (SWFP). The Los Angeles County Regional Planning Commission considers whether to approve the new Conditional Use Permit (CUP). To approve and implement the proposed SWFP and CUP, the following specific discretionary approvals are needed:

- Approval of the project and certification of the Final EIR
- Approval of the new Conditional Use Permit
- Approval of the Revised SWFP

In accordance with Section 15161 of the State CEQA Guidelines, this document is intended to serve as a "project" EIR that examines the environmental impacts of the specific development project. In this case, several discretionary actions are requested to implement the proposed project. The analysis contained in this document will focus on the changes in the environment that will result from the development of the proposed project, over and above the existing baseline or permitted levels.

2.1.4 Related Approvals

This SEIR may be used by the following public agencies in the adoption of the proposed new Conditional Use Permit and approval of implementation activities there under (refer to Table 2-1);

1. California Integrated Waste Management Board;
2. Los Angeles County Department of Health Services as the LEA;
3. California Regional Water Quality Control Board;
4. Antelope Valley Air Quality Management District;
5. Any other public agencies that may approve implementation activities undertaken in accordance with the new Conditional Use Permit and Solid Waste Facility Permit.

2.1.5 Agencies Having Jurisdiction

The principal agency having jurisdiction over the proposed project is the County of Los Angeles, and specifically the Department of Regional Planning and the Department of Health Services because the project site is located in the unincorporated area of Los Angeles County. In addition, the proposed project includes a series of possible discretionary actions over which a number of agencies may have authority. Table 2-1 lists potential state, regional, and local approvals that may occur during the course of implementation of the proposed project and identifies the agencies with potential jurisdiction over these permits and/or approvals.

Table 2-1

List of Potential Responsible and Trustee Agencies
Project Approvals

Agency	Permit/Approval
Los Angeles County Integrated Waste Management Task Force	Finding of Conformance
Antelope Valley AQMD	Air Quality Permit(s)
California Integrated Waste Management Board	Solid Waste Facilities Permit
California Regional Water Quality Control Board	Waste Discharge Requirements National Pollution Discharge Elimination System (NPDES) Storm Water and Construction Permit

2.1.6 Availability of the Draft EIR

The Draft SEIR has been distributed directly to numerous State agencies through the Governor's Office of Planning and Research, as well as public agencies and to interested organizations for review and comment. The Draft SEIR and all related technical studies are also available for review and copying at the County of Los Angeles Department of Regional Planning. These documents and materials are also available for inspection at the following public libraries: Lancaster Library at 601 West Lancaster Boulevard, Lancaster, CA 93534; Quartz Hill Library at 42018 North 50th Street West, Santa Clarita, CA 93536; and Littlerock Library at 35119 80th Street East, Little Rock, CA 93543.

Agencies, organizations and individuals are invited to comment on the information presented in the Draft SEIR during the 45-day public review period. Specifically, comments are requested on the scope and adequacy of the environmental analysis. Following the public review period, a response to all substantive public review comments will be prepared and compiled into a Final SEIR, which will be considered by the Los Angeles County Regional Planning Commission for certification.

As indicated above, copies of the Draft SEIR for the new LLRC Conditional Use Permit are available for review at the libraries listed above and:

County of Los Angeles
Department of Regional Planning – Impact Analysis Section
320 West Temple Street
Los Angeles, CA 90012
Contact Person: Christina Tran (213) 974-6461

2.2 Methodology

The Los Angeles County Department of Regional Planning has determined through the initial study process that the proposed project includes minor changes (i.e., increase in daily capacity) to the original project approved by the County for the LLRC (i.e., lateral expansion of the existing landfill), which requires the issuance of a new CUP by DRP and SWFP by DHS. Therefore, as previously indicated (refer to Section 2.1.3), the Draft Supplemental EIR has been prepared in accordance with Section 15163 (Supplement to an EIR) of the State CEQA Guidelines because minor additions to the prior EIR (SCH No. 1993101036) would be necessary to adequately analyze the proposed project. As a result, this Supplemental EIR contains only the information necessary to apply to the project in the changed situation (i.e., increase in the daily capacity).

2.2.1 Existing Conditions

This introductory section describes the existing environmental conditions related to each issue analyzed in the Draft SEIR. In accordance with Section 15125 of the State CEQA Guidelines, both the local and regional settings are discussed as they existed at the time of issuance of the NOP, which was circulated for a 30-day comment period on May 26, 2004. The public comment period extended from May 28, 2004 through June 28, 2004.

2.2.2 Impact Significance Criteria

Section 15126 of the CEQA Guidelines requires that an EIR "identify and focus on the significant environmental effects" of a proposed project. "Effects" and "impacts" mean the same under CEQA and are used interchangeably within this Draft EIR. A "significant effect" or "significant impact" on the environment means *"a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project"* (Section 15382 of the CEQA Guidelines).

In determining whether an impact is "significant" within CEQA's definition, emphasis has been given to the basic policies of CEQA with respect to a particular subject matter, as well as to specific criteria for significance found in the CEQA Guidelines (refer to Appendix G to the CEQA Guidelines). An effort has been made to avoid overly subjective significance criteria that are not based in specific CEQA policies and/or generally accepted thresholds upon which significance can be determined. For each subject area addressed within this Draft SEIR, significance criteria are identified that have been applied in analyzing the potential effects of the Proposed Project.

2.2.3 Standard Conditions and Uniform Codes

The Proposed Project incorporates, where appropriate, the applicable regulatory requirements as part of the project and as set forth in the California Code of Regulations and County of Los Angeles code and regulations, or other regulatory requirements prescribed by responsible agencies. It is important to note, however, that the proposed project does not include any new construction (i.e., buildings and/or related structures). For analytical purposes, compliance with these regulatory requirements is not considered mitigation because it is part of the project as designed. Where an otherwise significant impact is avoided, in whole or in part, due to the application of standard regulatory requirements or project features, the text will note that an issue of environmental concern exists and that it is addressed by a standard regulatory requirement. The requirement has been identified and the manner in which it addresses the environmental issue is also identified. This approach precludes the use of mitigation measures that are mere repetitions of common practice, County planning/approval procedures, or laws that are applicable to the Proposed Project.

2.2.4 Impact Analysis

The impact analysis presented in the Draft SEIR identifies specific project-related impacts. As described above, the significance criteria provide the basis for distinguishing between impacts that are determined to be significant (i.e., impact exceeds the threshold of significance) and those that are less than significant. The existing environmental setting (i.e., existing conditions) serves as the backdrop for gauging the nature and extent of impacts anticipated to result from the proposed project. Potential impacts presented in the Draft SEIR are based on a "worst case analysis," which assumes a daily volume of 3,000 tons per day of refuse at the Lancaster Landfill.

In assessing the impacts of the Proposed Project and the various CEQA alternatives, the County of Los Angeles has conducted the following analysis:

> "Potential effects" of the project have been identified. Initially, these potential effects are identified on a cursory level. No determination is made that they truly are "significant," "adverse," or "substantial." This process merely identifies issues and impacts, which, on a cursory level, may seem possible. "Potential effects" include issues identified in the initial study/environmental assessment as well as those raised by the public, the landowners, the County or City of Lancaster, and other public agencies.
>
> With respect to each potential effect, an analysis has been conducted to determine if, in fact:
>
> - The project produces the identified "effect"; and
> - The effect produces a substantial, or potentially substantial, change in the physical conditions within the area affected by the project (i.e., "significant").
>
> Where the investigation of a potential effect concludes the effect is too speculative for evaluation, that conclusion is noted and the discussion of that effect is ended. Where the investigation demonstrates a potential effect does or may (without undue speculation) occur, but is beneficial, that conclusion is noted. Where the investigation demonstrates a potential effect is not significant or not adverse, that conclusion is noted.

2.2.5 Mitigation Measures

Where the analysis described in Section 2.2.4 above demonstrates that a potential effect will result in a significant impact, that conclusion is noted and:

- Feasible mitigation measures are provided which will avoid or minimize the significant effects and, in most cases, reduce them to less than significant levels; or

- Where feasible mitigation measures are not identified which can reduce the significant effect(s) to less than significant levels, the significant effect will be identified as one that will result in "significant unavoidable adverse impacts".

2.2.6 Unavoidable Significant Impacts

Unavoidable significant adverse impacts (i.e., those effects that either cannot be mitigated or they remain significant even after mitigation) are identified in the Draft SEIR if the mitigation measures prescribed cannot reduce the significant impacts to a less than significant level (or the mitigation measures are infeasible, or their implementation cannot be guaranteed because they are the responsibility of another public agency). Prior to approval of the Proposed Project, the Los Angeles County Regional Planning Commission will be required to adopt a Statement of Overriding Considerations that identifies and describes the public benefit(s) associated with project implementation that offset the significant impacts.

2.3 Format of the Draft Supplemental EIR

As noted above, this EIR focuses on the analysis of those environmental resource areas that may experience significant adverse impacts as a result of the proposed project. The organization of the Draft SEIR is as follows:

Section 1.0 – Executive Summary. This section includes the executive summary, which summarizes the proposed project, the project alternatives and the potential environmental impacts of the alternatives.

Section 2.0 - Introduction. This section provides relevant, information, context and background (including a history of the proposed project) on the CEQA process and the proposed project.

Section 3.0 – Project Description. This section includes the project description and summarizes the project alternatives, the project objectives and the CEQA process for the proposed project.

Section 4.0 – Environmental Analysis. This section describes the existing conditions, the thresholds of significance, the analytical methodology, the impacts of the proposed projects, mitigation to reduce or avoid any significant adverse impacts, and the level of significance of the impacts after mitigation for the environmental parameters determined in the Initial Study to potentially result in significant adverse impacts.

Section 5.0 – Impacts Determined to be Less than Significant. This section summarizes the environmental impacts found not to be significant based on the analysis provided in the initial study (IS).

Section 6.0 – Significant Unavoidable Adverse Impacts. This section summarizes the potential significant unavoidable adverse impacts of the project alternatives, after mitigation, based on the analysis documented in Chapter 4.0.

Section 7.0 – Irreversible and Irretrievable Commitment of Resources. This section addresses the potential for irretrievable and irreversible commitment of resources associated with the project alternatives.

Section 8.0 – Growth-Inducing Impacts. This section addresses the potential for growth-inducing impacts associated with the proposed project.

Section 9.0 – Cumulative Impacts. This section addresses the potential for cumulative impacts associated with the proposed project.

Section 10.0 – Alternatives. This section provides a qualitative analysis of the potential environmental impacts associated with the Alternatives to the Project and the No Project Alternative.

Section 11.0 – Organizations and Persons Consulted. This section lists the County of Los Angeles, and consultant personnel who were consulted during or responsible for the preparation of this Draft SEIR.

Section 12.0 – Bibliography. This section lists the references used in the preparation of this SEIR.

Section 13.0 – Glossary of Terms. This section provides a comprehensive glossary of terms and acronyms used in the SEIR.

Appendices. The Appendices to this EIR include the technical reports prepared to analyze the potential impacts of the project alternatives.

CHAPTER 3.0
PROJECT DESCRIPTION

3.1 Project Location

Lancaster Landfill and Recycling Center (LLRC) is located in the Antelope Valley, south of the Kern County boundary in unincorporated Los Angeles County (refer to Figure 3-1). The LLRC property is located approximately two miles northeast of the City of Lancaster on unincorporated land bounded by Division Street on the west, Avenue "F" on the north and Avenue "G" on the south; 10th Street East divides the Eastern Area from the remainder of the landfill property. The Vicinity Map (Figure 3-2) illustrates the relationship of the site to the surrounding street system. The site address is 600 East Avenue F, Lancaster, California 93535. The LLRC property encompasses approximately 276 acres and occupies the northeast ¼ of Section 35 and the north ½ of the northwest ¼ of Section 36 and the south 30 acres of the northwest ¼ of the northeast ¼ of Section 36, Township 8 North, Range 12 West, San Bernardino Meridian.

The LLRC is composed of the following components: the current active landfill area (102 acres); the Western Area (62 acres), the Eastern Area (112 acres). The existing (i.e., current) landfill area includes a 78-acre refuse area, a 20-acre ancillary facilities area, and four acres of buffer. Of the 62-acre Western Area, refuse fill will be placed within 50 acres. The Eastern Area includes 81 acres within the waste footprint for that area. The waste footprints in the three landfill areas comprise a total of 209 acres of the 276-acre LLRC landfill property. Figure 3-3 illustrates the limits of the site components identified above and the landfill footprint. Waste transported to the LLRC under the proposed project will be placed only over the lined areas of the landfill.

3.2 Environmental Setting

3.2.1 Existing Land Use

Surrounding Land Use

The LLRC site is located in a generally rural area within unincorporated Los Angeles County. Existing land uses within a three-mile radius of the project site include open space, scattered single-family residences, Piute Ponds and Edwards Air Force Base to the north and northeast. Land uses to the northwest and west include open space, scattered single-family residential development along Avenue "G", a few mobile homes, sewage disposal ponds, duck ponds, Sierra Highway and the Southern Pacific Railroad. Open space, light industrial/commercial, a radio tower, mobile home parks, residential tract homes and the District Fairgrounds are located within a three miles radius south of the site. Land uses to the east include open space and a limited number of singe-family residential dwelling units. No agricultural lands are located adjacent to the LLRC.

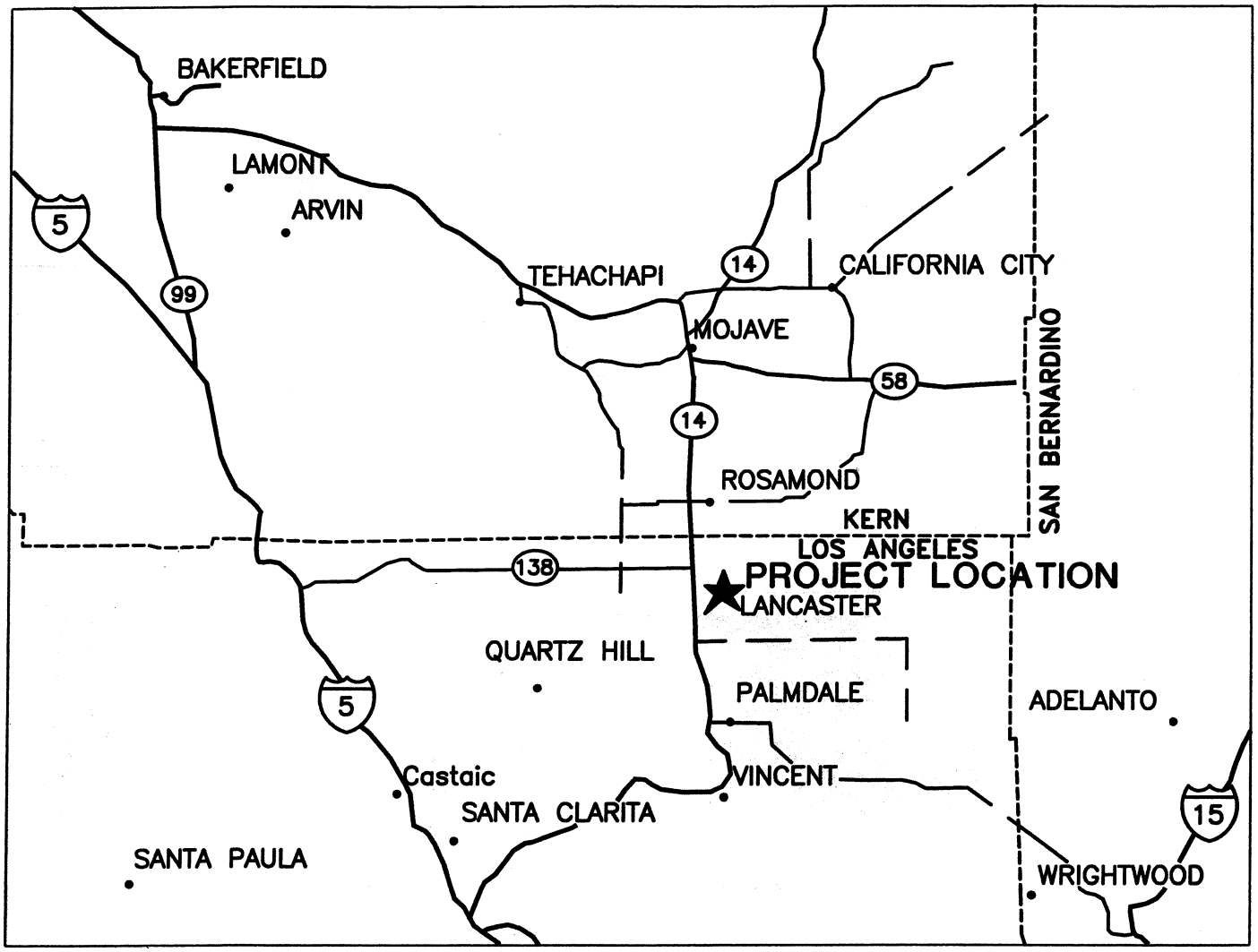


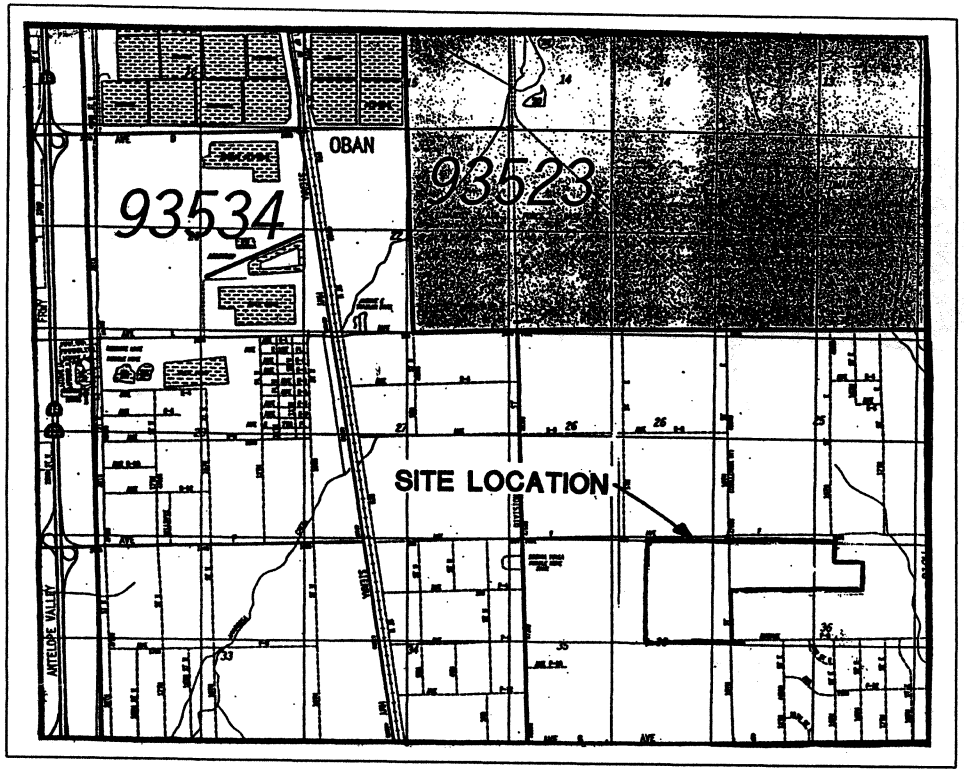
Figure 3-1

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

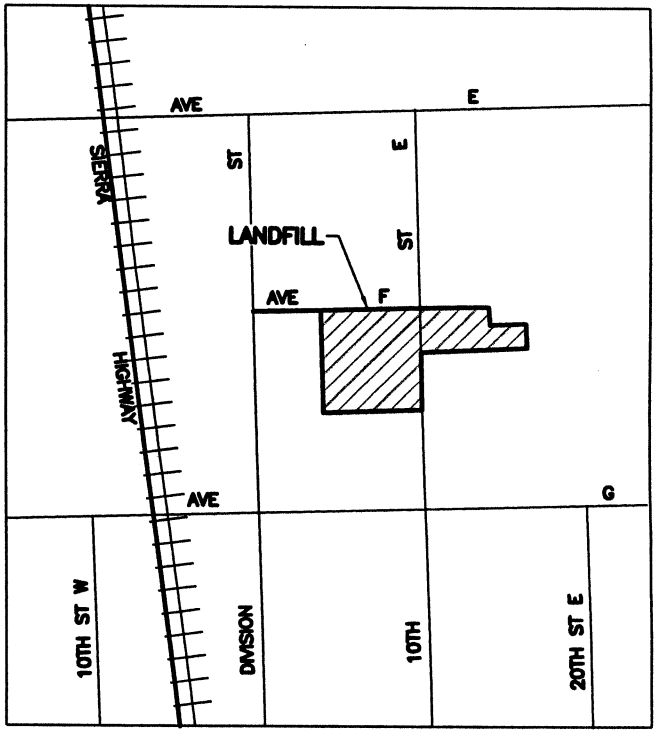
LANCASTER LANDFILL AND RECYCLIN CENTER

REGIONAL LOCATION MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME	171921DB



VICINITY MAP
NTS



LOCATION MAP
NTS

Figure 3-2

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANCASTER LANDFILL AND RECYCLING CENTER

SITE VICINITY AND LOCATION MAPS

JOB NO.	2003.039
DATE	5-2004
DRAWN BY	C.A.L.
FILE NAME:	171890DB

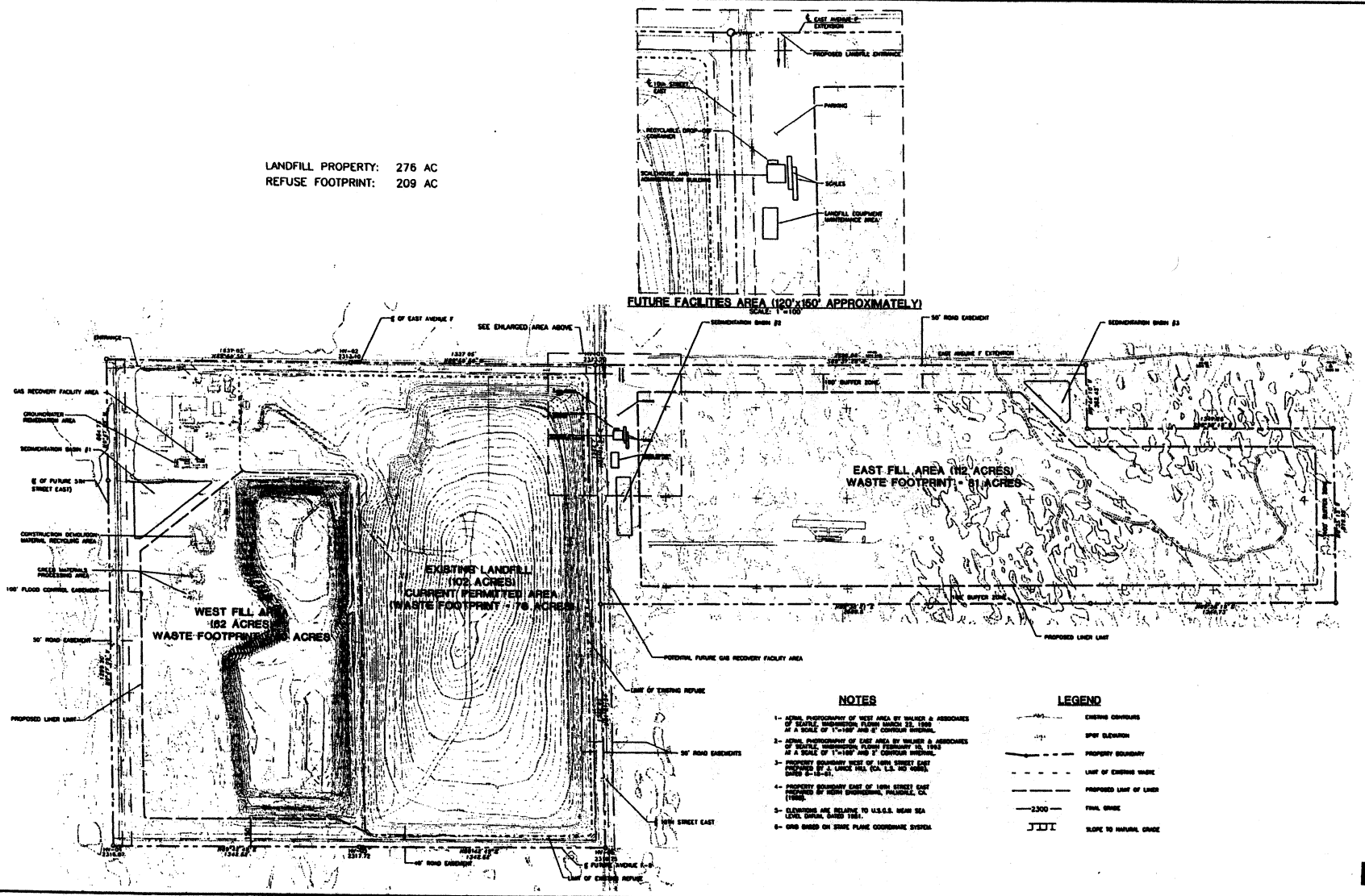


Figure 3-3

(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANCASTER LANDFILL AND RECYCLING CENTER

Site Boundaries Map

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	17191208

3.2.2 General Site Characteristics

The LLRC, is owned and operated by Waste Management of California, Inc. (WMI) and is operating as a Class III disposal site, which primarily accepts non-hazardous municipal solid waste. Landfills are classified according to their ability to contain waste as defined in the California Code of Regulations (CCR), Title 27. The landfill is currently permitted under CUP 93-070 to accept up to 1,700 tons per day of municipal solid waste (MSW) for disposal with additional inflow of soil, green waste, and recyclable and beneficial use materials. In accordance with the existing SWFP (19-AA-0050, p. 6), the maximum daily tonnage does not include clean dirt for cover or slope fill or waste processed and put to beneficial use on the landfill or separated or otherwise diverted from the waste stream and exported from the landfill for recycling purposes. The percent of incoming waste as presented in the site's 2000 Joint Technical Document (JTD) is 22 percent municipal refuse, 27 percent commercial/industrial wastes, 18 percent construction/demolition wastes, and 33 percent mixed waste.

As of November 28, 2005, the LLRC has a remaining air space of approximately 17,860,810 cubic yards, which will accommodate approximately 13,395,000 tons of refuse. Based on current disposal rates at the landfill of 1,700 tons per day (tpd) maximum, it is estimated that the landfill will reach its current permitted capacity in approximately 25 years or 2031.

The customers served by the existing landfill include residential, commercial, light industrial, and construction customers. The local area served is generally the Lancaster/Palmdale area and surrounding areas (i.e., Quartz Hill, Antelope Acres, Lake Los Angeles, Pearblossom, and other unincorporated L.A. County areas). Waste is also received from Edwards AFB (approximately 20 miles), Acton (20 miles), Wrightwood (45 miles), and Gorman (50 miles). In addition, transfer trucks deliver waste from transfer stations located in the greater Los Angeles basin.

Wastes Currently Accepted

The waste categories identified above that are accepted at the LLRC are described below.

- Municipal Refuse and Commercial/Industrial: Includes solid waste generated by residences, commercial accounts such as retail stores, restaurants, bars and offices, and non-hazardous waste generated by the industrial sector.
- Construction and Demolition: Includes construction and demolition materials such as wood, metal, glass, concrete and asphalt (most of which is recycled).
- Co-mingled Waste (Recyclables): Includes paper, green and wood wastes, glass, plastic, etc.

Non-Friable Asbestos-Containing Waste

The landfill operator accepts non-friable asbestos-containing waste for disposal. Typical wastes include floor tiles and roofing materials. All applicable local (i.e., Rule 1403 Antelope Valley Air Pollution Control District), state (i.e., 22 California Code of Regulations), and federal (29, 40, and 49 Code of Federal Regulations) regulations regarding the disposal of asbestos-containing waste are complied with by the landfill. An Asbestos Waste Handling Plan for non-friable asbestos waste disposal procedures has been prepared and is adhered to during disposal operations. This plan is available for review at the LLRC.

Non-Hazardous Contaminated Soils

The landfill also accepts non-hazardous contaminated soils. These soils typically contain regulated quantities of petroleum products or crude oil and are used as daily cover or beneficial use if the material meets permit guidelines. Soils containing volatile organic compounds (VOCs), within acceptable limits as defined by District Rule 1166, are managed as municipal waste. Contaminated soils are only accepted at the site if they are determined to be non-hazardous and pass a paint filter test.

Agricultural Waste

The site also accepts agricultural waste. This waste includes the residues resulting from diverse agricultural activities such as the planting and harvesting of row, field, tree and vine crops, the production of milk, and the raising of animals for slaughter. Agricultural waste produced in field and orchards is comprised of plant residues, such as stems, stalks, straw, leaves, prunings, and abandoned produce. Waste produced in dairies and feedlots consists of manure, straw, etc.

Treated Auto Shredder Waste

Acceptance of treated auto shredder waste (TASW) has been approved by the RWQCB and the SWFP for disposal or alternative daily cover (ADC). The TASW, which is accepted from metal salvage yards, is tested extensively by the generator to ensure that the waste is non-hazardous. TASW is unloaded close to the active face to facilitate use as daily cover as described in the JTD as revised (February 2, 2000).

Sewage Sludge

The LLRC is permitted under its current SWFP and WDRs from the RWQCB to receive dewatered sewage sludge with 50 percent solids or more. The maximum amount of sludge the LLRC can accept is 10 tpd. Any sludge, prior to acceptance at the site, is tested for heavy metals and moisture content. Depending on the situation, total petroleum hydrocarbons (TPH) or additional testing may also be required for the sludge. Analytical tests, which establish whether the sludge is suitable for disposal in a Class III municipal solid waste landfill, are conducted by the wastewater treatment plant operator and are reviewed by the RWQCB and landfill operator. Test results are reviewed and approved prior to accepting this material at the landfill. If the chemical composition of the sludge is not appropriate for disposal in a Class III (municipal solid waste) landfill, the waste is rejected.

Recycling

Recyclable waste materials are diverted from landfill disposal for beneficial use whenever possible. Wood waste and green waste recovery is part of the existing operations. Loads of acceptable wood and green waste are directed to the processing area. The material is cleaned of refuse, stockpiled, and ground into chips on a periodic basis. Wood chips are transported to end users such as electric generating plants and landscape services. Green waste is principally used onsite for landfill cover (to prevent wind and surface water erosion) or soil amendment.

Construction and demolition (C&D) waste recycling is also part of the existing operations. Loads of inert debris, such as asphalt and concrete, are stockpiled until there is sufficient material for crushing. A mobile crusher processes this material into road base that is used onsite for roads and other construction projects. Loads of mixed construction and demolition waste (i.e., wood, metal, sheet rock, brick, etc.) are also recycled whenever possible. Stockpiled materials are transported to a C&D materials recovery facility located in northern Los Angeles.

The landfill allows self-haulers to drop off bulky items at the landfill. These waste are principally appliances (also know as "white goods"). Truckloads of white goods are hauled to metal recyclers located within the Los Angeles metropolitan area. Other wooden bulky items are directed to the wood waste area.

Unacceptable/Prohibited Wastes

Hazardous Waste

The site does not accept hazardous waste or special waste as defined by CCR Title 22. WMI has established a hazardous waste exclusion program, which includes a sign listing prohibited wastes, random thorough visual load inspections, a detailed training program pertaining to hazardous wastes, and an emergency response training program. Random load inspections are supplemented by continuous observations by trained personnel at the working face as well as trained equipment operators. If any hazardous materials are identified, the customer will not be allowed to dispose of the material at the landfill. Should the customer/hauler depart prior to the detection of the presence of such materials, a portion of the working face will be cordoned off until the waste is contained and/or transported off-site. Responsible agency(s) and/or emergency response units will be notified as required. Any such activity requiring notification of emergency response units is required to be recorded in an on-site incidence log. In addition to the above, a radiation monitor is also maintained at the scale facility to exclude any potential radioactive material from entering the landfill. Vehicles with loads that trigger the monitor are isolated from the main operations and the Los Angeles County radiological unit is contacted to determine the source and disposition of the radioactivity that triggered the alarm.

Household Hazardous Waste

The project applicant's hazardous waste exclusion program limits the intake of all hazardous wastes, including those from households. WMI encourages educational means to help reduce the illegal disposal of household hazardous wastes. WMI supports the County's household hazardous waste programs identified in the Household Hazardous Waste Element and the Los Angeles County Integrated Waste Management Plan (CWIMP).

The SWFP also prohibits accepting any large dead animals unless approved by the LEA.

Site Operational Features

Hours of Operation

The site operating hours for receipt of refuse are Monday through Saturday from 5:00 a.m. to 8:00 p.m. The landfill is closed Sundays and holidays. Site operations (landfill and ancillary operations) are permitted Monday through Saturday from 5:00 a.m. to 10:00 p.m. to allow for site preparation, maintenance, processing of refuse, and daily covering. Refuse is not accepted at the scale house beyond gate hours except on special occasions as approved by the LEA and during emergencies.

Employees

The ongoing development of the landfill will require a varying number of both permanent and short-term employees. Short-term employees are required during construction of major project elements (e.g., liners, leachate collection and recovery system, and support facilities). The site is currently operated by 13 permanent employees as indicated in Table 3-1.

Table 3-1

Current Employees
Lancaster Landfill and Recycling Center

Classification	Number of Personnel
Landfill Manager	1
Operations Supervisor	1
Equipment Operators	3
Gate Attendants	2
Mechanics	1
Laborers	3
Site Engineer	1
Secretary	1
Total	**13**

SOURCE: Waste Management of California, Inc., (2004).

Equipment

At a minimum, the following equipment identified in Table 3-2 is currently maintained on site and is used to conduct landfill operations.

Table 3-2

On-Site Equipment
Lancaster Landfill and Recycling Center

Type	Number
Trash Compactor	2 (One active, one back-up)
Loader	1
Bulldozers	2 (One active, one backup)
Scrapers	1
Motorgrader	1
Water Truck	1

SOURCE: Waste Management of California, Inc., (2004).

The equipment listed above is adequate to ensure that units are available during routine equipment maintenance or major repairs of other units. Local owners/operators and contractors can provide additional equipment, if demand warrants. Back-up rental units are also available for temporary use, if needed.

Disposal Procedures

The landfill areas are constructed using the area fill method. Compacted refuse is placed in cells approximately 20 feet in thickness. Interim slopes typically are constructed at 3:1 (horizontal to vertical) maximum steepness. Minimum slope for the top of a cell is approximately three percent to prevent ponding.

Refuse is spread and compacted in thin layers approximately two feet thick on an approximately 100 to 200-foot wide sloped working face. An exception is the first layer of refuse over the liner, which must have a thickness of approximately ten feet in order to protect the liner. Landfill compaction equipment, consisting of trash compactors or equivalent, make numerous passes over each layer of refuse in order to achieve a minimum in-place refuse density of 1,200 pounds per cubic yard, and reduce the long-term settlement of the landfill. Large or bulky objects are separated from refuse at the working face. These objects are placed in the upper portion of the advancing refuse layer and thoroughly crushed by compaction equipment to prevent bridging and localized subsidence at a later time.

Daily Cover

The purpose of daily cover is to control various potential nuisances, such as blowing litter, odors, vectors and scavenging. The working face is covered daily with a minimum six-inch compacted (eight inches in wet weather) thickness of soil cover or an approved Alternative Daily Cover (ADC). When available, contaminated nonhazardous soil meeting regulatory requirements is also used for daily cover as allowed by the WDRs for the site.

The LLRC also uses tarps and green waste as ADC, and as previously approved by the LEA. Landfill personnel pull the ADC tarp over the slope trash base and anchor the edges to prevent the wind from removing the tarp. Soil is still used daily but use of the ADC minimizes soil usage. The tarp is manually pulled from the trash at the beginning of each day and set aside, out of the way of refuse truck operations.

Green waste from curbside residential pick-up operations is deposited near the working face and used as ADC at the end of the working day. The green waste is not stockpiled overnight.

Intermediate Cover

When no additional waste materials are scheduled to be placed over the surface of the advancing lift beyond 180 days, or some other period prescribed in the WDRs issued by the RWQCB, the top and side slopes of the lift is covered with a minimum 12-inch compacted thickness of intermediate soil cover or other intermediate cover alternatives approved by regulatory agencies.

Recycling Procedures

As part of a developing response to the requirements of AB 939 the following describes the recycling elements, which have been initiated at the LLRC. These operations are included in the site's SWFP.

Residential and Commercial Recycling

Three categories of recyclables (i.e., green/wood waste, cardboard and office paper, and co-mingled recyclables) are collected by curbside collection vehicles in the surrounding community. The curbside green/wood waste material is used on-site to complement other alternative daily cover (ADC) cover materials, while co-mingled recyclables are processed at an off-site recycling facility. Cardboard and office paper is also collected from local businesses for processing at an off-site recycling facility.

Recycling collection vehicles, primarily those owned and/or operated by WMI, will weigh-in at the landfill gate prior to the recyclables being transported to off-site recycling/processing facilities. In the future, the applicant may seek approval of an onsite sort line and balers to increase the efficiency and local control of recyclables processing. Specific records of refuse and recyclable weights and origin are maintained on site to ensure proper application of AB 939 credits.

Cardboard and office paper are collected separately from incoming refuse. Front-end loader trucks are used to collect corrugated cardboard and office paper. As with the curbside collection vehicles, the quantity and origin of cardboard or office paper is determined and recorded prior to offsite processing. Collected materials are transported to any of a number of processing facilities located within the Santa

Clarita Valley, Greater Los Angeles area and other southern California areas, depending on the prevailing market conditions.

Types and Numbers of Vehicles

Traffic volumes associated with the landfill and recycling activities and associated peak daily tonnage were addressed in the Draft EIR dated April 1997 (certified on May 13, 1998), and the Addendum to the EIR dated June 26, 2000. These documents were developed in support of the LLRC expansion, which was approved in the SWFP (September 7, 2000), which denotes the "Permitted Traffic Volume" as "N/A" (i.e., not applicable). Although there is no permit limits, the typical maximum projected traffic volume from landfill and recycling operations is estimated to be between 325 and 375 vehicles per day, assuming a refuse inflow rate of 1,700 tpd. On occasion, when the vehicle mix is primarily private vehicles (i.e., during the annual Saturday community cleanup day), traffic volumes are significantly higher. The general types of refuse and private vehicles utilizing the LLRC include: 3- and 4-axle refuse collection "packer" trucks; "rolloffs;" semi-trailers; personnel transportation vehicles; private vehicles (i.e., pick-up trucks and automobiles); and equipment service and maintenance vehicles.

Saturday Operations Traffic

As indicated above, existing disposal operations at LLRC include service to local residents that utilize the site primarily on Saturdays. Private automobile and pick-up customers paying for disposal have been the largest component of Saturday vehicle counts. The highest Saturday vehicle counts occur when the County required "Free Dump Days" are scheduled. The current County requirement for LLRC is to schedule two such days per year. A recent Joint Technical Document (JTD) amendment was approved by the LEA on January 3, 2005, to recognize, among other elements, the circumstances of Saturday disposal activity, the potentially significant impact of recent residential growth in the area, and the large number of vehicles necessary to affect a successful "Free Dump Day" campaign. A vehicle count up to 900 vehicles per day was approved by the LEA in a January 3, 2005 JTD amendment to address these abnormal and infrequent Saturday events. (Saturday "Free Dump Day" vehicle counts for the proposed project are anticipated to continue in the same relatively high volume compared to the typical operational day. As such, the proposed project recognizes the higher 900 per day vehicle count number for these events.)

3.2.3 Los Angeles County General Plan and Antelope Valley Areawide Community Plan

The subject property is governed by two land use plans: the Los Angeles County General Plan and Antelope Valley Area Wide Community Plan. Although the project site is not located within the City of Lancaster, it is within the City's sphere of influence and could be affected by that City's General Plan if the area were ever to be annexed.

County of Los Angeles General Plan and Antelope Valley Community Plan

The LLRC property is currently designated as R (Non-Urban) in the 1980 Countywide General Plan (refer to Figure 3-4). Similarly, the Antelope Valley Area Wide Community Plan land use designation for the site is N-1 (Non-Urban) as reflected in Figure 3-5. Other land use designations within a three-mile radius of the subject property include an area approximately two miles southwest of the site (south of Avenue "H") that accommodate a range of urban uses, including residential, commercial, industrial, public and semi-public facilities, and open space. The area north of Avenue "E," that includes Edwards Air Force Base, is designated for open space.

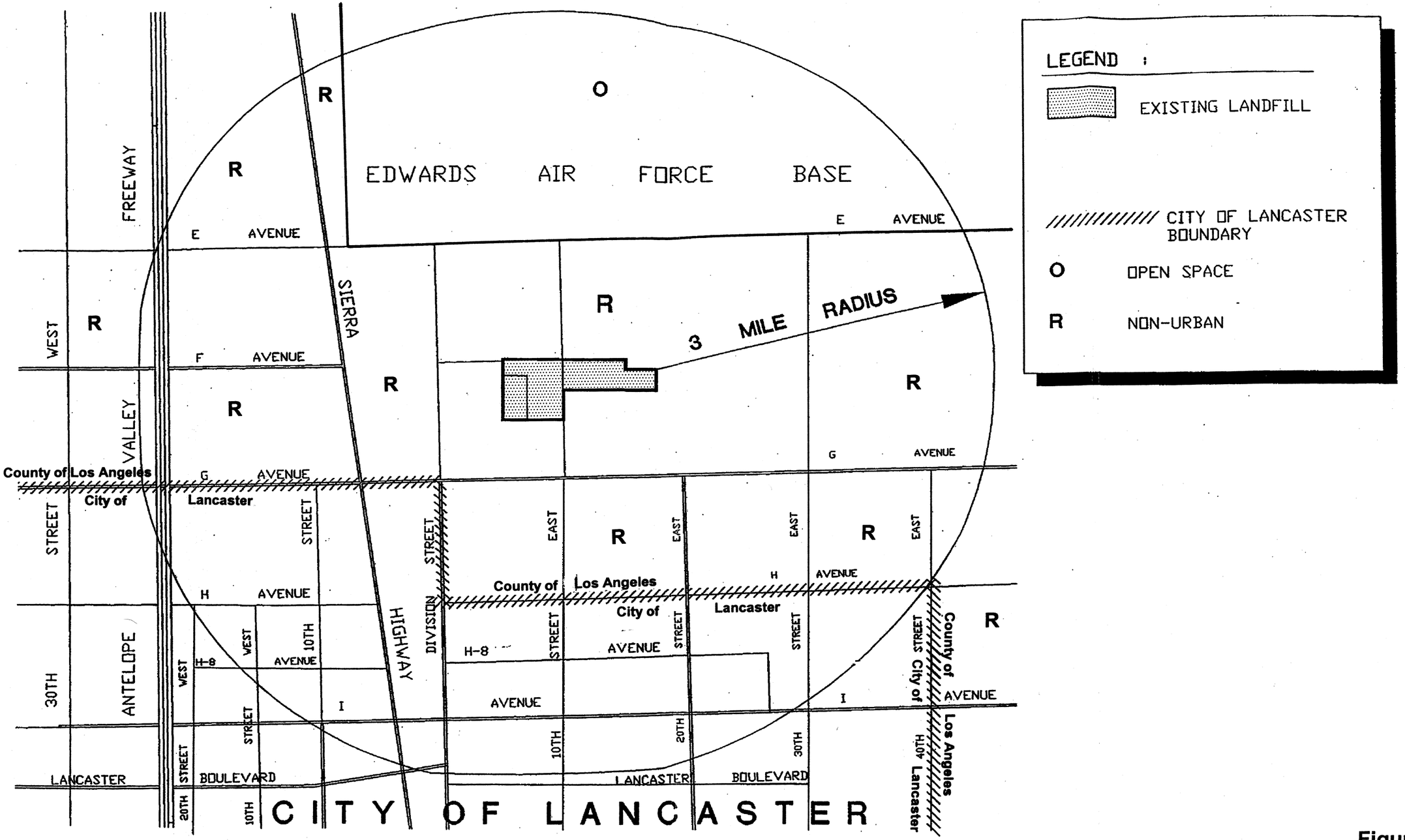


Figure 3-4

SOURCE: Land Use Policy, Los Angeles County, November, 1980.

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANDCASTER LANDFILL AND RECYCLING CENTER

LOS ANGELES COUNTY GENERAL PLAN LAND USE MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171913DB

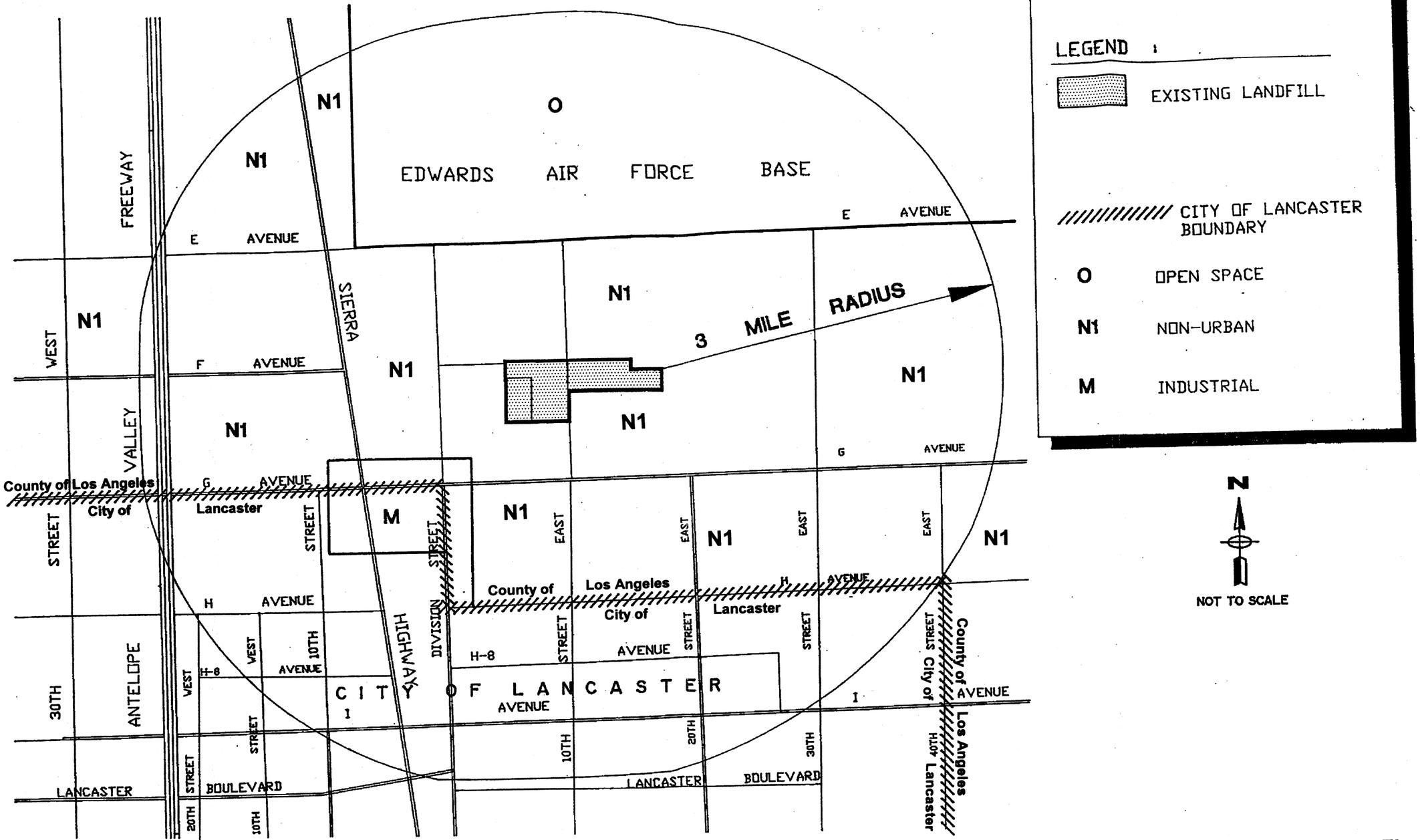


Figure 3-5

SOURCE: Antelope Valley Areawide General Plan Land Use Policy Map, Feb. 1989.

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANDCASTER LANDFILL AND RECYCLING CENTER

ANTELOPE VALLEY AREAWIDE LAND USE MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171914DB

The proposed project is consistent with policies adopted by the County of Los Angeles, both in the County General Plan and in the Antelope Valley Areawide Community Plan, which guide development. Table 3-3 reflects the policies that apply to the proposed project and a discussion of how the project is consistent with those specific policies.

Table 3-3

Los Angeles County General Plan Policy Plan Consistency Analysis
Lancaster Landfill and Recycling Center

Applicable Policy	Consistency Analysis
Land Use	
Protect major landfill and solid waste disposal sites from encroachment of incompatible uses.	Consistent The LLRC is located within an area of the County that is removed from areas where residential development exists and the County has not approved residential development in proximity to the LLRC. Further, the proposed project does not include any residential or other land uses that would be incompatible or inconsistent with the use of the site as a sanitary landfill. With the exception of increasing the daily capacity of the LLRC to 3,000 tpd, no new physical or environmental changes would occur that would conflict with this policy.
Assure that the new development is compatible with the natural and manmade environment by implementing appropriate locational controls and high quality design standards.	Consistent No new development or change in land use is proposed; the LLRC will continue to function as a Class III sanitary landfill with an increased daily capacity. However, use of the site will be subject to all applicable regulatory environmental controls prescribed by the LEA, AVAQMD, and the RWQCB.
Protect the character of residential neighborhoods by preventing the intrusion of incompatible uses that would cause environmental degradation such as excessive noise, noxious fumes, glare, shadowing and traffic.	Consistent Although the increase in daily capacity will result in some increase in traffic that would be generated by the LLRC, the increases are minor and would not adversely affect traffic and circulation in the vicinity of the subject property and environs. The resulting noise and air quality impacts would also not significantly affect residential or other sensitive land uses, which are not located in the immediate vicinity of the subject site.
Promote improved interjurisdictional coordination of land use policy matters between the County, cities, adjacent counties, special districts, and regional and subregional agencies.	Consistent As indicated previously, the LLRC is regulated by several agencies, including those under the County of Los Angeles and the State of California. The LEA, which would maintain local jurisdiction, is responsible for ensuring that all relevant regional and state-mandated regulations are implemented. With the exception of the increase in daily capacity, no significant changes to the operational characteristics are proposed and the LEA will maintain jurisdiction and ensure that compliance with all relevant regulatory requirements prescribed in the SWFP.
Ensure that cities have a voice in land use decisions within the adopted spheres of influence.	Consistent The LLRC is located within the Lancaster sphere of influence. The proposed project is entirely consistent with the land use plans adopted for the site for that portion of the City's sphere, which is designated Medium Industry. The Draft SEIR will be distributed to the City for review and comment. All comments, including any received from the City of Lancaster, will be forwarded to the Los Angeles County Regional Planning Commission for consideration.
Noise	
Determine and evaluate the future noise levels associated with all major transportation facilities in the County.	Consistent The Draft SEIR has thoroughly evaluated the potential noise impacts along the surrounding arterial system from the proposed project. As indicated in the analysis, traffic-related and

Applicable Policy	Consistency Analysis
	operational noise increases associated with the proposed project do not result in a significant increase in ambient noise levels.
Circulation	
Support traffic-operation improvements for improved flow of vehicles.	Consistent The proposed project will contribute to roadbed deficiencies along three roadway segments in the vicinity of the project. Appropriate mitigation (i.e., "fair share contribution") has been identified to improve those roadway segments to facilitate safe movement of vehicles.
Conservation, Open Space and Recreation	
Preserve significant ecological areas by appropriate measures, including preservation, mitigation, and enhancement.	Consistent The project site is not currently a significant ecological area. Although no subsequent biological surveys have been conducted on the subject property, several mitigation measures were prescribed and have been implemented when the expansion of the LLRC was approved. These measures include revegetation (with native species) of completed landfill cells, additional pre-construction surveys and transplantation of sensitive species to undisturbed areas. Implementation of the proposed project will not result in any additional impacts to important biological or ecological resources.
Public Facilities	
Ensure the location, acquisition, and development of landfill site that meet the environmental and siting criteria for hazardous liquid and solid wastes.	Consistent The LLRC has been operational since 1954. The landfill complies with all regulatory requirements and conditions prescribed in the approved SWFP. The LLRC does not accept any hazardous materials, including liquids and solid wastes.
Design water and waste management systems that enhance the appearance of the neighborhoods in which they are located and minimize negative environmental impacts.	Consistent The LLRC utilizes well water to minimize dust generation associated with landfill operations on the site. Appropriate environmental protection systems have been included in the design and operation of the existing landfill to ensure that negative impacts are minimized. In addition, upon closure of the landfill, the site be revegetated with native species and will become open space.
Promote solid waste technology, including source reduction, to reduce dependence on sanitary landfills.	Consistent Three categories of recyclables are collected by curbside collection vehicles and categorized on site for on-site use and for transport to an off-site processing facility. The categories include a curbside recycling program has been implemented to collect commingled recyclables from local residences, cardboard and office paper collection from local businesses, and a wood waste recovery operation.
Facilitate the recycling of wastes such as metal, glass, paper and textiles.	Consistent The LLRC includes a recycling component that sorts some materials (e.g., wood, concrete and construction materials, etc.). The incorporation of recycling at the landfill results in the efficiency of the landfill for the disposal of non-recyclable materials
Use technology for the conversion of waste to energy.	Consistent The LLRC continues to evaluate conversion technologist although current conditions are infeasible for such applications due to the low volumes and poor quality of the gas. Nonetheless, WMI will continue to monitor the production of landfill gas at the LLRC and study the feasibility of establishing "waste to energy" capability, consistent with the policies and programs of the Los Angeles County General Plan.
Accelerate the implementation of advanced technological methods of waste disposal and expand the countywide capacity	Consistent

Applicable Policy	Consistency Analysis
of sanitary landfills only as justified by need.	Implementation of the proposed project will result in an increase in the daily capacity of the County's existing landfill system. At the present time, the County is exporting some of the refuse generated in the County to disposal sites located outside the County.
Protect public health and prevent pollution of ground water through the use of whatever alternative is necessary.	Consistent As previously indicated, the LLRC has been designed in accordance with the applicable regulatory requirements that address public health and safety and groundwater protection. Adequate environmental control systems are in place and will continue to be implemented to ensure the protection of public health and protection of the environment, including groundwater, air quality and other resources.

Several policies articulated in the Antelope Valley Area Wide Community Plan also guide development of the unincorporated area of the County, including the subject property. These relevant policies are identified in Table 3-4.

Table 3-4

Antelope Valley Area Wide Community Plan Policy Plan Consistency Analysis
Lancaster Landfill and Recycling Center

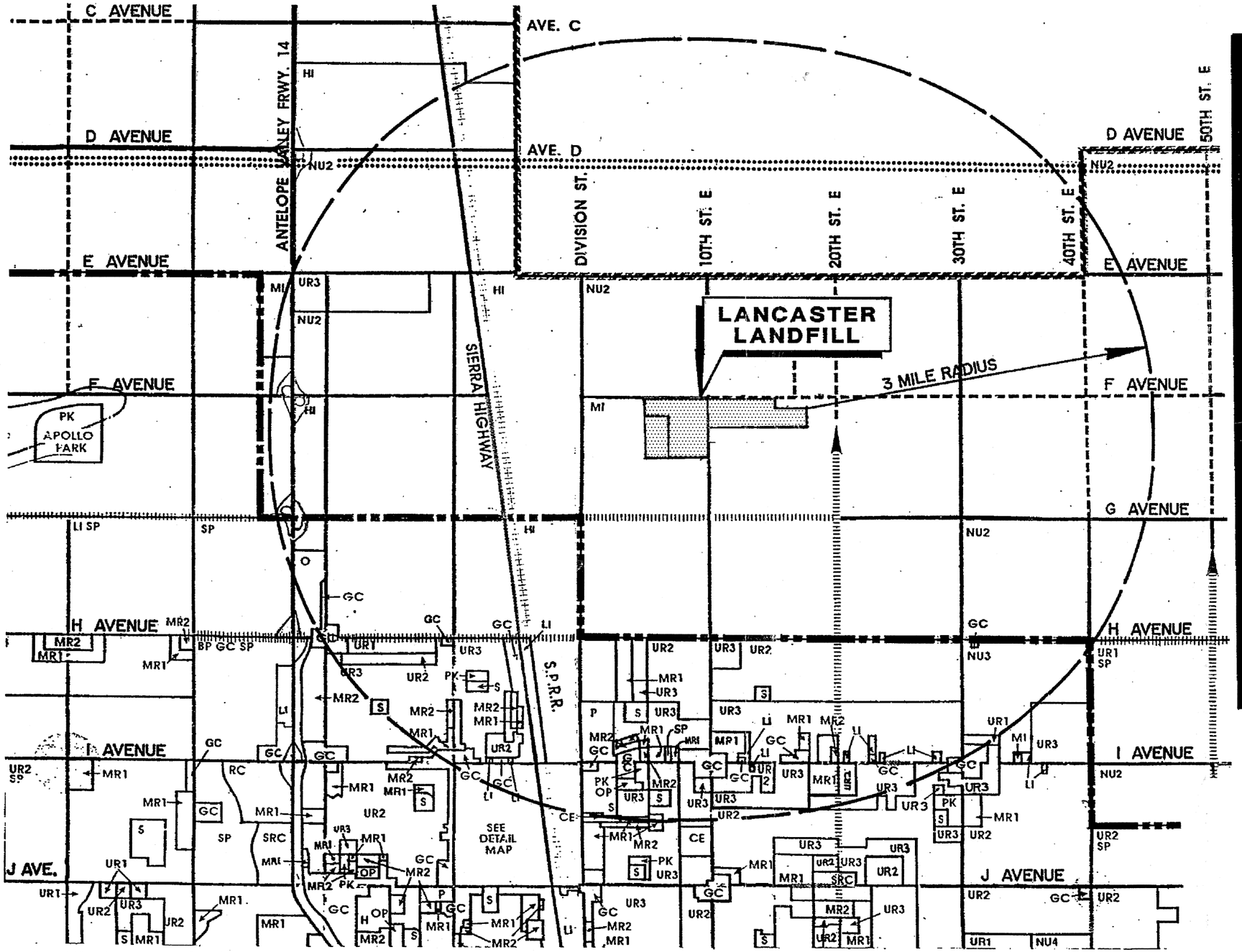
Policy No.	Applicable Policy	Consistency Analysis
Land Use		
2	Closely monitor growth in the Antelope Valley to maintain a balance between development and the capacity of the environmental, economic, and manmade or social systems.	Consistent The proposed project would allow for an increase in the daily capacity at the LLRC and, consequently, in the County's system-wide daily capacity to keep pace with the growth occurring within the Antelope Valley and County of Los Angeles.
29	Encourage development of services to meet the needs of Antelope Valley residents including health, education, welfare, police and fire, governmental operations, recreation, cultural, and utility services. Such services should be expanded at a rate commensurate with population growth.	Consistent The proposed project is specifically intended to provide increase daily refuse capacity at the LLRC in order to meet the needs of the existing development in the Antelope Valley and other areas of the County.
Circulation		
80	Implement roadway improvements coincidental with actual land use development and increasing traffic.	Consistent Project implementation will incorporate certain improvements to existing roadways as a result of the increased vehicular trips associated with the increase in daily capacity. These roadway improvements will maintain the integrity of the circulation system in the vicinity of the project site.
Public Services and Facilities		
107	Continue to use land use planning and control as a tool in Water Quality Management.	Consistent Several environmental controls are in place at the LLRC, including those that address LFG, leachate and control systems that comply with regulatory requirements for sanitary landfills to protect the environment. These systems will be maintained through the life of the LLRC.
110	Require that all newly constructed residences and public facilities located in the flood fringe be suitably flood-proofed.	Consistent A drainage master plan has been prepared for the LLRC that identifies a variety of drainage and flood control facilities for the landfill to direct surface flows from the site to regional facilities that protect the site

		from flood hazards.
Environmental Resource Management		
123	Preserve the Antelope Valley's SEAs in as viable and natural a condition as possible, recognizing the resource values at stake and the constraints imposed by competing priorities and objectives.	Consistent The Final EIR certified in 1997 for the LLRC evaluated the potential impacts to the natural habitat associated with expansion of the landfill. Although no SEAs are located within the limits of the LLRC or in the immediate vicinity of the landfill, adequate mitigation measures were identified and implemented to address impacts to the natural habitat and resources. Implementation of the proposed increase in daily capacity will not have any effect on existing SEAs or biological and/or natural resources in the project environs.
Noise		
174	Use "worst case" or highest potential noise exposure levels within the planning period as the basis of land use and development controls to prevent future noise-use incompatibilities.	Consistent The noise analysis conducted for the proposed project addresses "worst case" conditions for activities conducted at the LLRC. Further, noise generated at the site is subject to the conditions and regulations specified in the County's Noise Control Ordinance.
Seismic Safety		
183	Establish and enforce standards and criteria to reduce unacceptable levels of seismic risk.	Consistent The LLRC has been designed to meet all regulatory standards established by the County and State for Class III landfills.

In addition to the County plans identified and described above, the site and surrounding area are located within the Lancaster sphere of influence. As such, the City has identified potential future land use designations for territory located within the sphere of influence, including the subject property. These land uses are identified and described below.

City of Lancaster General Plan

Preliminary land use designations adopted for the site and surrounding area by the City of Lancaster are illustrated on Figure 3-6. As illustrated on that figure, the site and area to the south are designated for Medium Industry (MI). The area north of Avenue "F" is pre-designated Non-Urban (NU2), which would allow residential development at a density of 0.4 dwelling unit/acre (du/ac), or 1 du/2.5 acres. Areas within the City south of Avenue "H" (i.e., approximately 1.5 miles south of the site) are designated for a range of urban uses by the City, including residential, commercial, industrial and public facilities.



LEGEND :

NON URBAN
- NU1 0.1 DU/AC
- NU2 0.4 DU/AC
- NU3 1.0 DU/AC
- NU4 2.0 DU/AC

URBAN RESIDENTIAL
- UR1 2.1 - 3.0 DU/AC
- UR2 3.1 - 4.5 DU/AC
- UR3 4.6 - 6.5 DU/AC

MULTI-RESIDENTIAL
- MR1 6.6 - 15.0 DU/AC
- MR2 15.1 - 30.0 DU/AC

COMMERCIAL
- GC GENERAL
- SRC SUB-REGIONAL
- RC REGIONAL
- OP OFFICE/ PROFESSIONAL

EMPLOYMENT
- BP BUSINESS PARK
- LI LIGHT INDUSTRY
- MI MEDIUM INDUSTRY
- HI HEAVY INDUSTRY

SPECIFIC PLAN
- SP SPECIFIC PLAN

FACILITIES
- P PUBLIC
- S SCHOOL
- PK PARK
- H HEALTH CARE
- CE CEMETERY
- O OPEN SPACE

- EXPANDED STUDY AREA
- SPHERE OF INFLUENCE
- CITY BOUNDARY
- PROPOSED REGIONAL ARTERIAL
- PAVED ROADS
- UNPAVED ROADS
- EDWARDS AIR FORCE BASE BOUNDARY
- PLANNING AREA BOUNDARY
- COMMERCIAL/MULTI-FAMILY ACTIVITY NODE 10 ACRES
- EXISTING LANDFILL

N

NOT TO SCALE

SOURCE: Lancaster General Plan, Land Use Map, City of Lancaster, California, March 1992.

Figure 3-6

(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANDCASTER LANDFILL AND RECYCLING CENTER

CITY OF LANCASTER
LAND USE MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171915DB

Los Angeles County Siting Element

The LLRC has been in operation for more than 50 years and is identified in the Countywide Siting Element. With the exception of the request for an increase in the daily capacity, no other changes are proposed that would conflict with the existing goals and policies articulated in the Los Angeles County Siting Element. Therefore, project implementation is also consistent with the goals and policies of the Los Angeles County Siting Element, which are intended, in part, to ensure that adequate landfill capacity exists in the County. In addition, these policies are intended to facilitate waste diversion and recycling programs, etc. in order to maximize landfill capacity throughout the County. Although implementation of the proposed increase in daily capacity of the LLRC to 3,000 tpd would reduce the life of the LLRC, the proposed project is consistent with the Siting Element by providing at least 15 years of landfill capacity. Table 3-5 identifies the relevant objectives of the Siting Element and a discussion of the project's consistency with each objective.

Table 3-5

Siting Element Consistency Analysis
Lancaster Landfill and Recycling Center

Applicable Policy	Consistency Analysis
To protect the health, welfare, and safety of all citizens by addressing the disposal need of the 88 Cities and the County unincorporated communities in Los Angeles County during the 15-year planning period through development of environmentally safe and technically feasible disposal facilities for solid waste which cannot be reduced, recycled, or composted. This goal incorporates policies to: ▪ Enhance in-County disposal capacity ▪ Facilitate utilization of out-of-County/remote disposal sites	Consistent The Project continues existing operational methods to protect health, welfare, and safety as well as serve as part of the County's regional system of landfills with a site life of at least 15-years, which is compatible with the planning period.
To foster the development of transformation and other innovative solid waste disposal technologies as alternatives to land disposal.	Consistent The Project continues to emphasize the development of innovative solid waste technologies as alternatives to land disposal, including ongoing commercial and residential recycling, beneficial use of various materials, and efforts to encourage construction and demolition recycling. Ongoing gas recovery operations are also being investigated for applicability to energy conversion in the future.
To protect the economic well-being of Los Angeles County by ensuring that the cities and the County unincorporated communities are served by an efficient and economical public/private solid waste disposal system.	Consistent The Project continues to serve the Los Angeles County incorporated and unincorporated communities as an integral part of the Countywide disposal system.
To provide siting criteria that considers and provides for the environmentally safe and technically feasible development of solid waste disposal facilities.	Consistent The Project remains in full compliance with the siting criteria and continues to provide an environmentally safe and technically sound disposal option for Los Angeles County.
To reduce the volume (tonnage) of solid waste requiring land disposal or transformation by continuing to implement and expand source reduction, recycling, composting, and public education programs.	Consistent The Project includes the continuation of existing programs oriented to diverting reusable wastes from land disposal and participates in public education programs with local government and community organizations and also expands capabilities to utilize green waste materials for beneficial use.
To conserve Class III landfill capacity through diversion of inert waste, disposal of inert waste at unclassified landfill, increased waste disposal compaction rate, and the use of green waste and other appropriate materials for landfill daily cover.	Consistent The Project will continue and enhance existing efforts to divert inert materials and/or process such materials for reuse. Compaction equipment will continue to be evaluated for maximum compaction results. The use of green waste for

Applicable Policy	Consistency Analysis
	daily cover will also continue as part of this Project.
To promote and encourage waste diversion activities at disposal facilities.	Consistent The Project promotes and encourages waste diversion as a continuation of existing community education programs and operational procedures, which include the reuse of inert materials, beneficial use of green waste, and diversion of construction and demolition materials.
To promote adequate markets for recycled materials and compost products.	Consistent The Project will continue the activities of the existing operations to participate with its parent company (Waste Management) to promote and develop markets for recycled materials as the nation's largest recycling organization through its recycling affiliate Recycle America.

3.2.4 Existing Zoning

Los Angeles County Zoning

Because the site is located in unincorporated territory, the Los Angeles County zoning illustrated in Figure 3-7 governs the site. The portion of the site located west of 10th Street East is zoned D-2-2 (Desert/Mountain, 2-2 acre minimum); the eastern expansion area, located east of 10th Street East, is zone D-2-1 (Desert/Mountain, 1-acre minimum). Similar zoning classifications have been adopted by the County for the properties located to the west, north and south (D-2-2) and east, north and south of the site (D-2-1). Edwards Air Force Base, which is zoned O-S (Open Space) is located north of Avenue "E."

City of Lancaster Zoning

Although the majority of the area surrounding the proposed project site is located within unincorporated Los Angeles County, portions of the existing City of Lancaster boundaries are located within three miles of the property. Areas south of Avenue H are zoned by the City of Lancaster and include commercial (C), open space (O), commercial planned development (CPD), light industry (LI), medium industry (MI), and residential zones, including MDR (medium density residential), R (single-family residential, MHP (mobile home park), and RR (rural residential), as illustrated in Figure 3-7. It is important to note, however, that because the LLRC is not located within the Lancaster City limits, it is not subject this long-range plan unless and until it is annexed and approved by the Local Agency Formation Commission.

3.2.5 Physical Environment

As indicated above, the LLRC is located in an unincorporated area of Los Angeles County, within the sphere of influence of the City of Lancaster, in an area known as the Antelope Valley. The Antelope Valley is a topographic basin bounded on the north by the Rosamond Hills and Bissell Hills, on the northwest by the Garlock fault zone and the Tehachapi Mountains, on the southwest and south by the San Andreas fault zone and the San Gabriel Mountains, and on the east by low-lying hills that separate the basin from the Fremont and Mojave Valleys.

The main arterial for the Antelope Valley is the Antelope Valley Freeway (SR-14), which is located approximately three miles west of the LLRC. Circulation in the area consists of several north-south and east-west roadways. With the exception of the residential development that exists south of Avenue "H" in the City of Lancaster, the project environs is sparsely developed. The nearest existing residential development in the vicinity of the subject property includes some single-family residential and mobile homes approximately one-half mile west of the subject property.

A U.S.G.S. topographic map is presented in Figure 3-8 that illustrates the physical features in the project environs. Topographic relief of the site is relatively flat with a ground surface gradient of 15 to 20 feet over a distance of one-half mile (i.e., less than one percent). Ground surface elevations at the existing landfill site range from 2,310 feet above mean sea level (amsl) in the north to 2,325 feet amsl along the southern boundary. The average surface elevation is between 2,310 to 2,315 feet amsl in the west and approximately 2,320 amsl in the east.

Geology in the Lancaster area consists of alluvial sequences of unconsolidated to moderately indurated (i.e., hardened) gravel, sand, silt and clay eroded from the surrounding hills. Locally, alluvial deposits are up to 8,000 feet thick. The existing landfill site does not contain any rock outcroppings or unique features.

The LLRC is located within the Antelope Valley Groundwater Basin (AVGB), which underlies an extensive alluvial valley in the western Mojave Desert. Elevations within the basin range from 2,300 to 3,500 feet above mean sea level. Primary water-bearing materials in the AVGB include the Pleistocene and Holocene age unconsolidated alluvial and lacustrine deposits, which consist of compact gravels, sand, silt, and clay. Two main aquifers form the basin: a lower aquifer and an upper aquifer (i.e., the primary source of groundwater for the valley). Wells in the basin typically have a moderate to high ability for water well production. The parts of the basin with declining water levels extend along the Highway 14 corridor from Palmdale through Lancaster to Rosamond and surrounding Rogers Lake on Edwards Air Force Base. Total dissolved solids (TDS) content in the basin averages 300 milligrams per liter (mg/L) and ranges from 200 to 800 mg/L. Several public and private water agencies provide potable water within the basin.

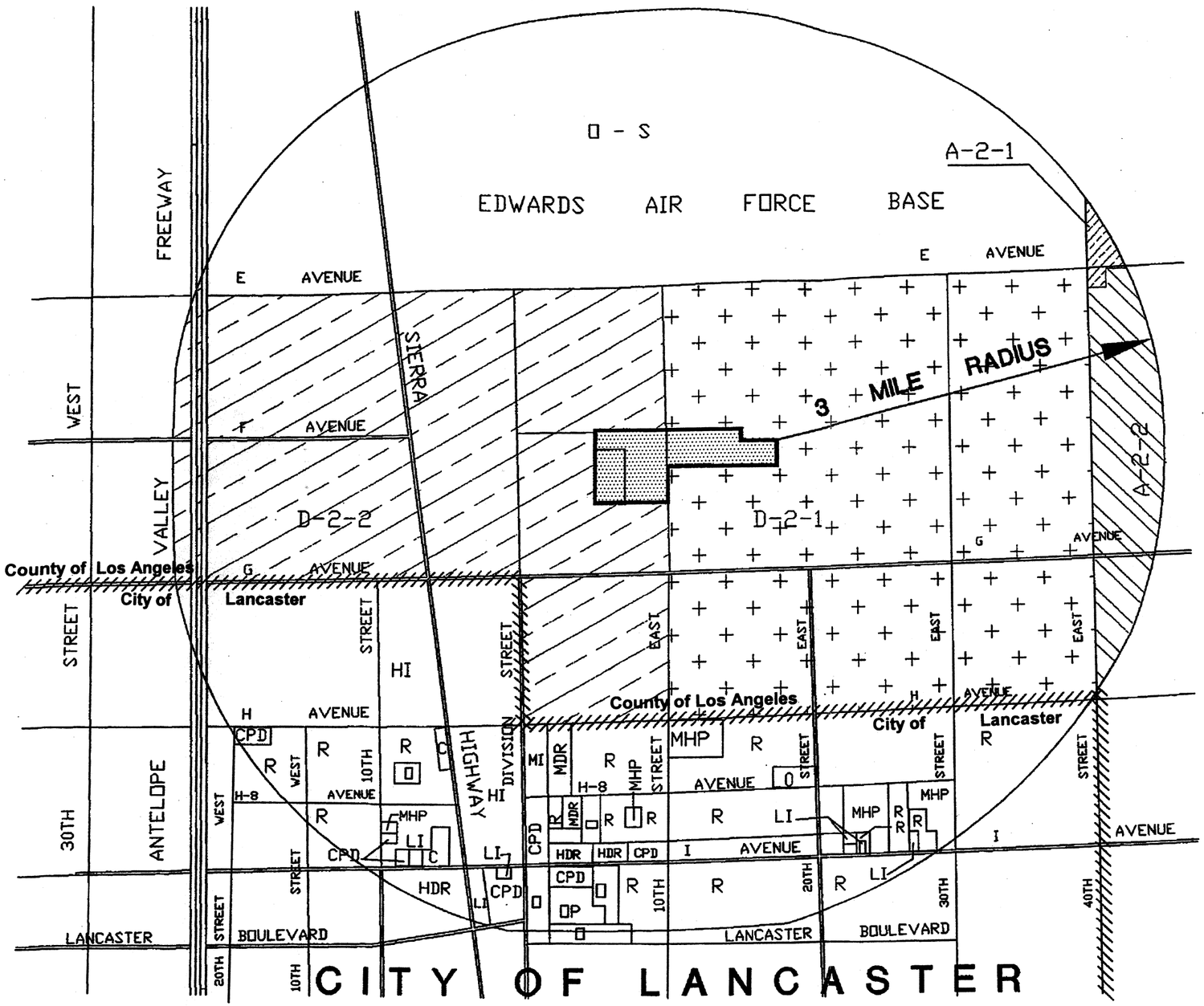
Surface water hydrology in the area of the project site typically flows in a northwesterly direction. Ultimately, surface water drains to Amargosa Creek, located approximately two miles northwest of the landfill, which in turn flows north to Rosamond Lake Playa and Edwards Air Force Base.

The climate of the Lancaster area is characterized as semi-arid. Mean daily summer and winter temperatures range from 63°F to 93°F and 34°F to 57°F, respectively. The mean annual precipitation in the region is eight inches, occurring primarily during the months of November to April. Air Weather Service Records from Edwards Air Force Base indicate an average annual wind velocity of 8.3 miles per hour with a majority of the winds originating from the west, west-southwest, and southwest.

The Antelope Valley is in the Mojave Desert Air Basin (MDAB). Until 1997, the Los Angeles County portion of the Antelope Valley was under the regulatory authority of the South Coast Air Quality Management District (SCAQMD). With the creation of the Antelope Valley Air Pollution Control District (AVAPCD), much of the technical support (monitoring, enforcement, etc.) was transferred to the Mojave Desert AQMD. In 2002, the AVAPCD became the Antelope Valley Air Quality Management District (AVAQMD). The Mojave Desert AQMD still retains its role of technical support.

The South Coast and/or Mojave Desert AQMDs have operated an air quality monitoring station in Lancaster for a number of years. This station is considered representative of most of the developed areas of the Antelope Valley. Measured air pollutants include ozone, carbon monoxide, nitrogen oxides, and respirable particulates. These measurements have shown that photochemical smog levels (mainly ozone) are high in summer, and that dust levels may exceed particulate standards throughout the year, but that primary vehicular pollutant levels such as carbon monoxide, nitrogen dioxide or lead are very low in the Antelope Valley area.

As described in the 1997 EIR, the natural vegetation in the Lancaster area is Mojave Desert scrub. Species common to this habitat includes creosote, Joshua trees, borrobrush and saltbush. The undisturbed area of the site supports shadscale scrub dominated by shadscale, Joshua trees and cheat grass. The area is characterized by low hummocks and small depressions. The depressions are mostly unvegetated, although their margins support alkali popcorn flower, pepper grass and schismus grass.



LEGEND

- EXISTING LANDFILL
- CITY OF LANCASTER BOUNDARY
- ZONE A-2-1
- ZONE A-2-2
- ZONE D-2-1
- ZONE D-2-2
- ZONE O-S

M I	MEDIUM INDUSTRIAL
CPD	COMMERCIAL PLANNED DEVELOPMENT
MDR	MODERATE DENSITY RESIDENTIAL
MHP	MOBILE HOME PARK
R	RESIDENTIAL
O	OPEN SPACE
H I	HEAVY INDUSTRY
HDR	HIGH DENSITY RESIDENTIAL
C	COMMERCIAL
L I	LIGHT INDUSTRY
OP	OFFICE PROFESSIONAL

Figure 3-7

SOURCE: Los Angeles County Dept. of Regional Planning and City of Lancaster Zoning Map (Central)

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANDCASTER LANDFILL AND RECYCLING CENTER

LOS ANGELES COUNTY ZONING MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171916db

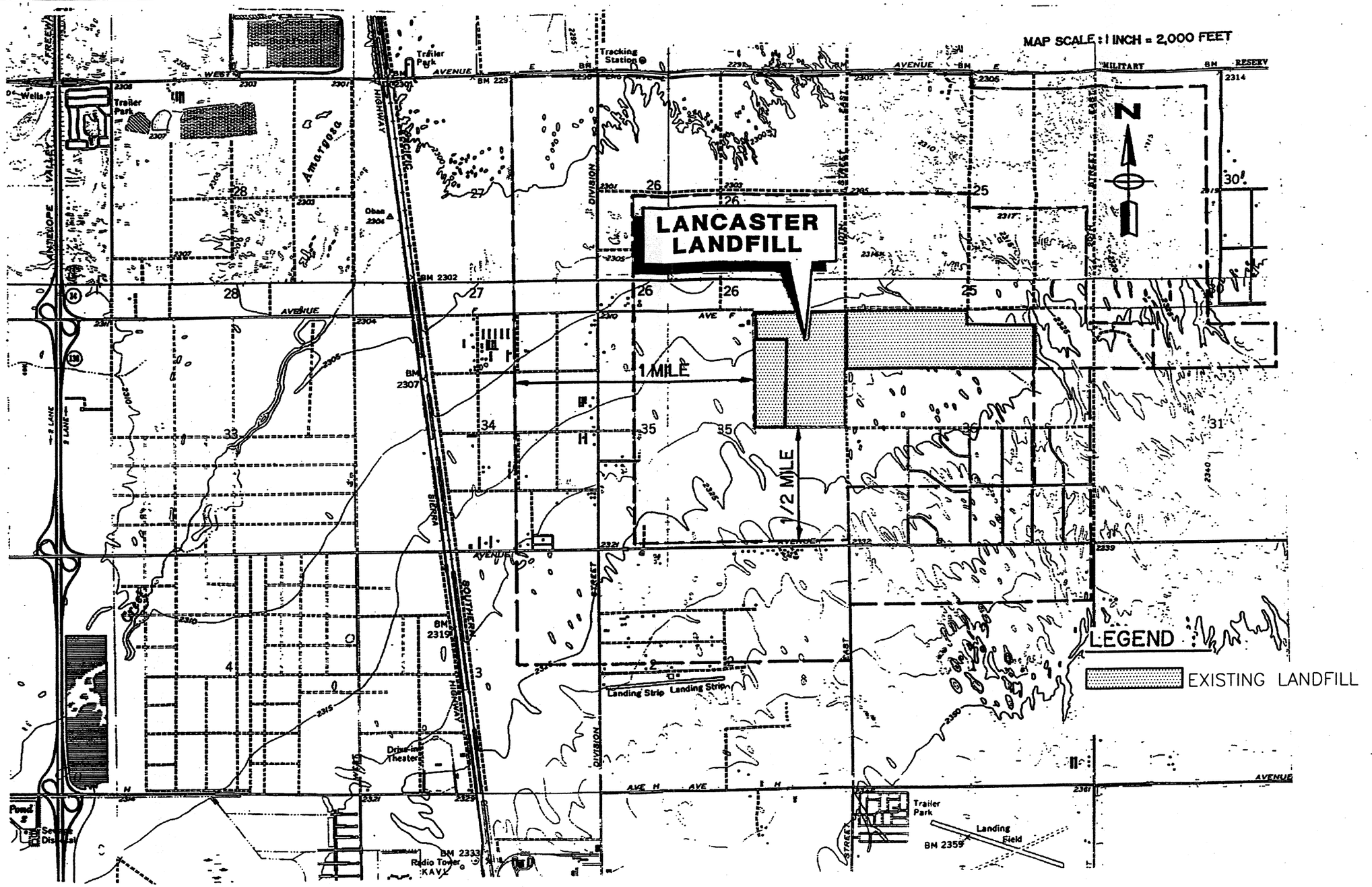


Figure 3-8

SOURCE: Base Map from USGS Maps of Lancaster, East 8, West and Rosamond Quadrangles, California, 1974.

(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANDCASTER LANDFILL AND RECYCLING CENTER

USGS TOPOGRAPHIC MAP

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171917db

As discussed in the 1997 DEIR, marginal habitat exists on portions of the landfill property that support the Desert horned lizard, Mojave ground squirrel and the Desert Tortoise. These species have been reported to be in the region; however, studies performed previously on the subject property did not indicate that they are present. Because the proposed project will not result in a horizontal expansion of the approved landfill footprint, and no new information or change in circumstances has been discovered, no new impacts from those previously identified and considered under CEQA will occur; thus, no additional environmental analysis is required.

3.2.6 Other Applicable Plans and Policies

County Integrated Waste Management Plan

In 1989, the State of California passed the California State Integrated Waste Management Act of 1989 (Assembly Bill 939), as amended by Assembly Bill 2707 (1990). This legislation requires every city and county in the State to prepare and submit a CIWMP to the CIWMB. The CIWMP places primary emphasis on implementation of all feasible source reduction, recycling and composting programs while identifying the amount of landfill transformation capacity that will be needed for solid waste that cannot be reduced at the source, recycled or composted. The CIWMP consists of all Cities' and the County's Source Reduction and Recycling Elements (SRREs), Household Hazardous Waste Elements (HHWEs), Non-Disposal Facility Elements, the Countywide Siting Element (CSE), and the Summary Plan. The Countywide Siting Element addresses the solid waste disposal need of the County for a 15-year period. This includes the management of the residual solid waste that cannot be reduced, reused, recycled, or composted. The LLRC expansion is listed in the siting element as a potential expansion site. Expansion of the LLRC was approved in 1997.

The LLRC has a Hazardous Waste Exclusion Program that includes a special waste implementation plan, load-checking program and hazardous waste storage area policies. The Hazardous Waste Exclusion Program prohibits the acceptance of hazardous wastes, including those from households. The operator of the LLRC has implemented a policy to educate the public to help reduce the illegal disposal of household hazardous wastes and to support the County's household hazardous waste programs identified in the County's HHWE.

In response to the requirements of AB 939 and the County's SRRE, a recycling program has also been implemented at the LLRC. The recycling program includes three categories of recyclables that are collected and either used on-site or transported to off-site processing facilities. The categories include a curbside recycling program to collect commingled recyclables from local residences, cardboard and office paper collection from local businesses, and a wood waste recovery operation.

Regional Comprehensive Plan and Guide

The Regional Council of the Southern California Association of Governments (SCAG) adopted a Regional Comprehensive Plan and Guide (RCPG), which is intended to serve the region as a framework for decision-making with respect to growth and changes that can be anticipated during the ensuing 20 years and beyond. The RCPG provides a general view of the plans of the various regional agencies that will affect local governments, or that respond to the significant issues facing Southern California. Additionally, it summarizes the plans that describe how the region will meet certain federal and state requirements with respect to transportation, growth management, air quality, housing, hazardous waste management and water quality management. A "Standard of Living" goal has been established for solid waste to develop self-sustaining recycled materials markets and cost-efficient waste management. A Quality of Life" goal has also been established to provide self-sustaining markets for recycled materials, waste prevention and recycling, and an improved process for siting facilities.

The existing LLRC is consistent with the RCPG's goals of cost-efficient waste management by reducing the economic impact of increased waste management costs due to waste-by-rail alternatives. It further supports the RCPG's goals for recycling through implementation of its recycling program included in the SWFP.

3.3 History and Evolution of the Project Site

The LLRC was first owned and operated by the Lancaster Dump Corporation from 1954 to 1965 and Universal Refuse from 1965 to 1973. WMI has owned and operated the Lancaster Landfill and Recycling Center since 1973. At that time, the landfill encompassed 102 acres, including an 82-acre landfill footprint and the ancillary facilities, which were located on the adjacent 20 acres.

In 1998, the County approved an expansion of the LLRC that encompasses 276 acres of property, which are divided into several components (refer to Section 3.4 for a description of those components). Operations are currently conducted on the original 102 acres of the property and the western disposal area. The expansion also approved up to 1,700 tons per day of municipal solid waste for disposal. The project site is permitted under its current Waste Discharge Requirements from the RWQCB. The Site Plan for the LLRC is illustrated in Figure 3-9.

Special Permit No. 952, which was approved by the Los Angeles County Board of Supervisors on February 16, 1954, allowed use of the site as a sanitary landfill. Subsequent operation and expansion of the project was authorized pursuant to Zone Exception Cases 2693, 3199, 5015, 8736, and Conditional Use Permit Nos. 444, 14830(5), and 90494-(5). The applicable, current Conditional Use and facilities permit approved for the LLRC include:

- Conditional Use Permit No. 93-070-(5), issued May 13, 1998, by the Regional Planning Commission of Los Angeles County (Approval of site vertical expansion to elevation 2,420 feet above mean sea level), which superceded Conditional Use Permit No. 89531, issued November 28, 1990.

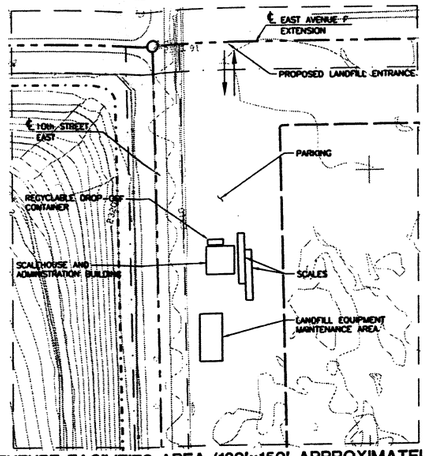
- Solid Waste Facilities Permit No. 19-AA-0050, issued September 7, 2000, by the California Integrated Waste Management Board (CIWMB) and the County of Los Angeles Department of Health Services (operating permit for facilities receiving solid waste – Class III landfill).

- Waste Discharge Requirements (WDRs), Regional Water Quality Control Board Order No. 6-95-103, WDID No. 6B190343001, adopted September 14, 1995 (for Corrective Action Program).

3.4 Project Need

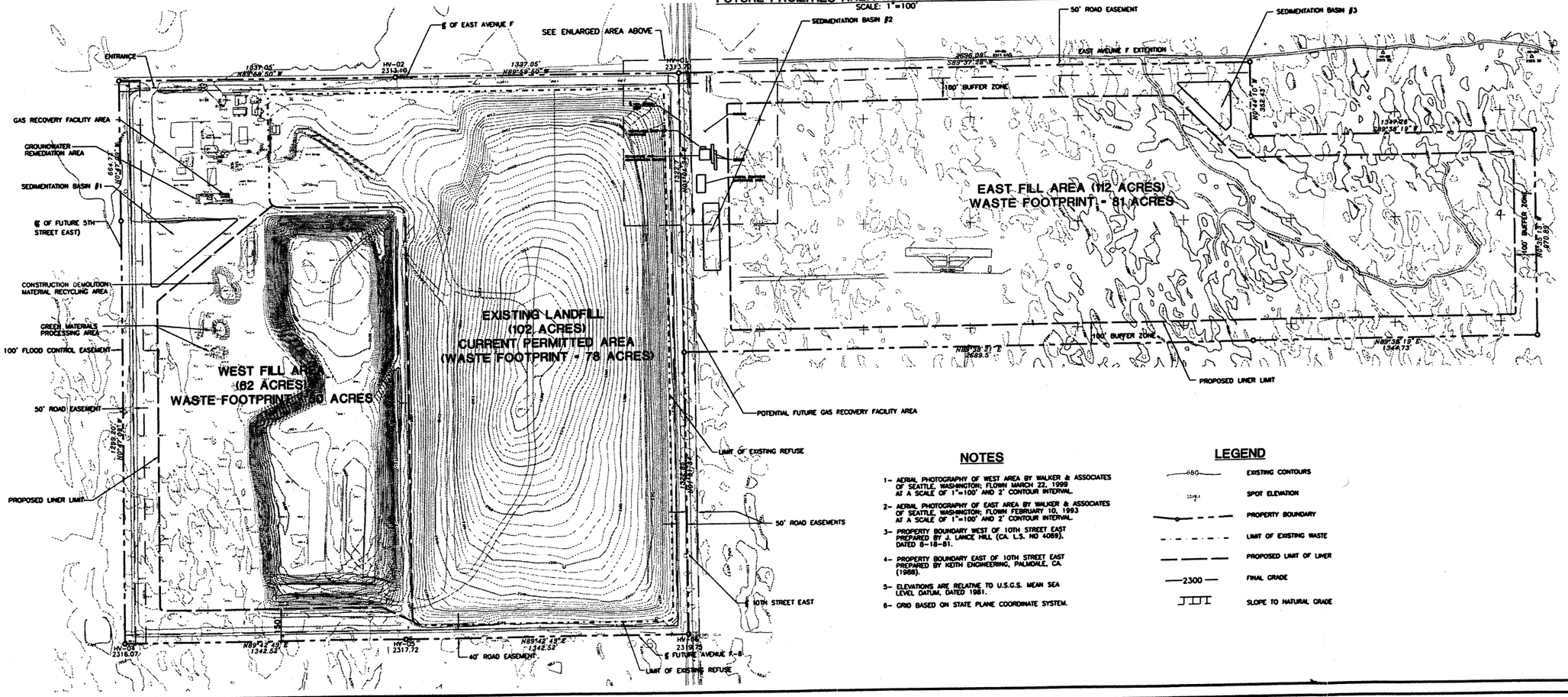
This section discusses the Need for the Project based on the current state of the Los Angeles County solid waste management system, including resource recovery efforts, waste generation, the in-County solid waste disposal system, waste export, waste disposal options, and an evaluation of daily refuse capacity which all reflect the need for additional daily refuse capacity in Los Angeles County.

LANDFILL PROPERTY: 276 AC
REFUSE FOOTPRINT: 209 AC



FUTURE FACILITIES AREA (120'x150' APPROXIMATELY)
SCALE: 1"=100'

N



NOTES

1- AERIAL PHOTOGRAPHY OF WEST AREA BY WALKER & ASSOCIATES OF SEATTLE, WASHINGTON; FLOWN MARCH 22, 1999 AT A SCALE OF 1"=100' AND 2' CONTOUR INTERVAL.

2- AERIAL PHOTOGRAPHY OF EAST AREA BY WALKER & ASSOCIATES OF SEATTLE, WASHINGTON; FLOWN FEBRUARY 10, 1993 AT A SCALE OF 1"=100' AND 2' CONTOUR INTERVAL.

3- PROPERTY BOUNDARY WEST OF 10TH STREET EAST PREPARED BY J. LANCE HILL (CA L.S. NO 4069), DATED 8-18-81.

4- PROPERTY BOUNDARY EAST OF 10TH STREET EAST PREPARED BY KEITH ENGINEERING, PALMDALE, CA (1988).

5- ELEVATIONS ARE RELATIVE TO U.S.G.S. MEAN SEA LEVEL DATUM, DATED 1981.

6- GRID BASED ON STATE PLANE COORDINATE SYSTEM.

LEGEND

- 850 — EXISTING CONTOURS
- SPOT ELEVATION
- PROPERTY BOUNDARY
- LIMIT OF EXISTING WASTE
- PROPOSED LIMIT OF LINER
- 2300 — FINAL GRADE
- SLOPE TO NATURAL GRADE

Figure 3-9

BAS (909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANCASTER LANDFILL AND RECYCLING CENTER

SITE PLAN

JOB NO.	X
DATE	6-2004
DRAWN BY	C.A.L.
FILE NAME:	171912DB

Waste Diversion

AB 939 required that all jurisdictions in California divert 50 percent of their waste by the year 2000 and thereafter. Jurisdictions in California committed a tremendous amount of resources to achieve the required 50 percent diversion rate by the 2000 deadline and have continued to pursue that rate. Most jurisdictions have had residential recycling programs, waste reduction and recycling education programs, green waste and other diversion programs tailored specifically for their particular needs. However by the year 2000, in Los Angeles County, 74 percent of the jurisdictions had diversion rates of less than 50 percent and 53 percent of the jurisdictions had diversion rates of less than 40 percent based on the CIWMB data base preliminary numbers. Additionally, it will be difficult for jurisdictions to achieve the last increment of required diversion since, in many cases, the most effective and economical programs have already been implemented. Complicating this matter further are the expected changes in population and economic activity that will increase the volume of waste generated.

It is expected that generation of waste for disposal will increase in Los Angeles County due to projected population and positive economic growth factors. In addition to Los Angeles County, the Antelope Valley (Valley) growth is expected to continue through at least the next two decades. The high desert climate coupled with the growth of the industrial areas and the future Palmdale International Airport have caused the Antelope Valley to rank as one of the fastest growing areas of Los Angeles County

The projected growth rate over the next 10 years will result in the generation of approximately 8,000 tpd in Los Angeles County of additional waste over the current generation rate that must be managed. Assuming the resource recovery programs currently in-place in Los Angeles County had reached their maximum effectiveness, a minimum of 4,000 tpd of additional daily permitted landfill capacity would be needed to accommodate the population and economic growth.

The Antelope Valley Landfill (AVL) in the City of Palmdale is the other regional facility in the northern portion of Los Angeles County. The AVL facility contains two separately permitted landfills physically separated by an 11-acre strip of land. One of the landfills (Landfill 1) is nearing permitted capacity and is permitted to accept up to 1,400 tpd. The other landfill (Landfill II) has not begun to receive waste and is permitted to accept up to 1,800 tpd. As of January 1, 2005, these combined facilities had approximately 11,023,000 cubic yards of air space remaining (i.e., 8,267,250 tons). Assuming the AVL, Landfill I has only two years of capacity remaining at 1,400 tpd, and Landfill II begins accepting waste at the rate of 1,800 tpd within two years, the AVL would continue to operate for about 14 years (2019). However, WMI is proposing to increase the daily capacity of the AVL from the current 1,400/1,800 tpd to 3,600 tpd (refer to Section 10.3.4 in this document) and expand the physical layout by connecting the two landfills, which will nearly double the cubic yard capacity. If the existing permits are revised to allow the expanded capacity and acceptance of 3,600 tpd, the AVL would be operational for approximately 16 years.

Additional daily refuse capacity will also be needed due to the closures of the other regional landfills over the next 10 years (e.g., Bradley and Puente Hills). It is therefore not feasible to expect that diversion alone will be adequate to accommodate anticipated growth, landfill closures, and associated reductions in system wide daily permitted refuse capacity.

Waste Generation

As previously discussed, most jurisdictions in Los Angeles County have maximized the available avenues to increase waste diversion. This fact, coupled with the economic and population growth, has created increased waste generation in Los Angeles County for the last five years. Currently, waste disposal is handled in one of two ways: disposal in a landfill and/or incineration to produce electricity in a refuse-to-energy facility. Waste destined for landfilling is accepted at either an in-County disposal facility or exported to an out-of-County landfill. Table 3-6 shows the total waste generated for disposal in Los Angeles County for the period 1998 through 2004, which indicates that waste generated increased at an annual rate of one percent between 1999 and 2002 and approximately two percent from 2002 to 2004. In addition, Table 3-6 also presents a breakdown of the total waste disposal into three major categories: in-County disposal, export, and refuse-to-energy.

The total waste generated for disposal in Los Angeles County presented in Table 3-6 does not include inert or construction/demolition wastes destined for landfills. As shown below, total solid waste generation after diversion within Los Angeles County was 11,966,728 tons in 2004. Using 307 work days/year, this annual volume of waste translates into an average of 38,979 tpd.

Table 3-6

Los Angeles County Waste Generation

Year	Total Waste Generated (Tons)	In-County Disposal (Tons)	Percent of Total	Export (Tons)	Percent of Total	Refuse to Energy (Tons)	Percent Of Total
1998	11,013,000	9,742,000	89	858,000	8	413,000	4
1999	11,143,000	9,950,000	89	738,000	7	455,000	4
2000	11,384,000	10,079,000	89	794,910	7	510,090	4
2001	11,410,000	9,823,000	86	1,040,000	9	547,000	5
2002	11,523,142	8,973,755	78	2,009,845	17	539,542	5
2004	11,966,728	9,110,298	76	2,308,181	19	548,249	5

SOURCE: Los Angeles County Public Works Department, Environmental Programs Division, Integrated Waste Management Plan Updates 1998 through 2004.
2004 Annual Report

The total volume of waste disposed in Los Angeles County landfills in 2004 was 9,110,298 tons or 29,675 tpd. Approximately 2,308,181 tons of waste was exported from Los Angeles County in 2004, which results in an average of 7,519 tpd of waste exported out-of-Los Angeles County in 2004. Another 548,249 tons were burned at the two waste-to-energy plants (CREF, located in Commerce and SERRF in the City of Long Beach) in 2004.

In-County Solid Waste Disposal System

Currently, solid waste disposed in Los Angeles County can be received at one of 15 facilities, including 13 landfills and two waste-to-energy plants as shown on Table 3-7.

It is important to note that, for purposes of this analysis, the Brand Park, Pebbly Beach, and San Clemente Landfills were not considered in the discussion of existing in-County landfill capacity. Pebbly Beach Landfill is located on the Island of Catalina and handles a limited portion of the island's waste (i.e., City of Avalon and adjacent unincorporated County areas). The San Clemente Landfill is owned and operated by the United States Navy and is available for use only by the Navy. In addition, both of these facilities have extremely limited remaining disposal capacity. Based on information presented on the CIWMB website, Brand Park Landfill has no remaining landfill capacity. Therefore, the list of 10 in-County landfills and two waste-to-energy facilities presented in Table 3-7 does not reflect these three sites.

As shown on Table 3-7, Los Angeles County's landfills and waste-to-energy facilities in 2004 had a combined permitted daily refuse capacity of 55,130 tpd. Although the 55,130 tons of permitted daily capacity for the 2004 in-County waste disposal system exceeded the average of 29,675 tpd of in-County waste generated for disposal in 2004, the permitted daily capacity does not reflect actual site specific limitations nor the pending closure of the Bradley and Puente Hills Landfills. Only five landfills in Los Angeles County are private and have no restrictions on waste acceptance. The Puente Hills Landfill, operated by LACSD, can accept waste from all areas in the County with the exception of cities and counties having populations of over 2,500,000 (e.g., City of Los Angeles). The remainder of the sites has some sort of restriction (i.e., waste shed limits) effectively reducing their permitted daily inflow rate. The effective reduction of permitted daily capacity is discussed below.

Table 3-7

In-County Landfill and Refuse-to-Energy Facilities
Maximum Daily Permitted Capacity/Effective Daily Capacity

	Facility Name[2]	Operator Type	Facility Type	Permitted TPD	Effective TPD[1]
1	Antelope Valley[3]	Private	Landfill	1,400	1,400
2	Bradley Avenue West[4]	Private	Landfill	10,000	800
3	Burbank	Public	Landfill	240	170
4	Calabasas	Public	Landfill	3,500	1,760
5	Chiquita Canyon	Private	Landfill	6,000	6,000
6	Commerce Refuse-to-Energy Facility (CREF)	Public	Waste-to-Energy	1,000[5]	565
7	**Lancaster**	**Private**	**Landfill**	**1,700**	**1,700**
8	Puente Hills[6]	Public	Landfill	13,200	13,200
9	Savage Canyon	Public	Landfill	350	274
10	Scholl Canyon	Public	Landfill	3,400	1,403
11	South East Resource Recovery Facility (SERRF)	Public	Waste-to-Energy	2,240	1,900
12	Sunshine Canyon	Private	Landfill	12,100	12,100
	Total			55,130	**41,272**

[1]Effective TPD is based on the permitted tonnage adjusted to account for limitations on inflow such as wasteshed restrictions, etc.) through August 2005.
[2]Does not include Pebbly Beach, San Clemente and Brand Park Landfills.
[3]Applied for expansion and/or increase to 3,000 tpd.
[4]Bradley Avenue West Landfill will close in April 2007, reducing effective countywide tpd capacity by 800 tpd.
[5]Not to exceed 2,800 tons/week.
[6]Puente Hills Landfill will close by the end of 2013, reducing effective countywide tpd capacity by 13,200 tpd.

SOURCE: CIWMB SWIS Information Data Base

The Los Angeles Countywide Siting Element (CSE), which was approved in late 1997 by a majority of the cities in the County of Los Angels with a majority of the cities' population and by the County Board of Supervisors in January 1998, projected that a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. A number of landfill closures have been experienced in recent years and more closures are expected to occur in the near future (Bradley Avenue West in 2007 and Puente Hills in 2013). The CSE recognizes the need for in-County disposal capacity and includes a policy to support expansion of existing landfills in the County of Los Angeles, including LLRC, as long as it is determined to be environmentally and technically feasible.

Daily Refuse Capacity Evaluation

Traditionally, refuse capacity analyses have focused on total refuse disposal capacity or airspace volume and not on daily permitted capacity. As discussed above, approximately 11,966,728 tons of refuse was generated for disposal in Los Angeles County in 2004, or 38,979 tpd. After removal of the waste that was exported and that processed through the County's two transformation facilities approximately 9,110,298 tons of waste were disposed of in Los Angeles County landfills or 29,675 tpd. The 2004 permitted daily inflow rate is 55,130 tpd, therefore, based on tons disposed in 2004, it would appear that the Los Angeles County solid waste system has sufficient permitted daily capacity. In fact, it appears that the County has sufficient permitted daily capacity to handle the 2004 total waste generated for disposal. However,

currently permitted and long-term daily refuse capacity in Los Angeles County is "effectively" reduced by several factors including:

- Wasteshed Restrictions
- Facility Design Limitations
- Limited Remaining Capacity
- Waste Stream Restrictions
- Geographic Location

To better define the distribution of waste generated in Los Angeles County, the following definition of "effective" daily inflow rate is used. The "effective" daily inflow rate is defined as the actual amount of solid waste that can be disposed of at the landfills in Los Angeles County, versus the permitted daily amount (the permit limit the landfill can receive per day). The 2004 "effective" inflow rate for Los Angeles County landfills is shown in Table 3-7 to be 41,272 tpd. Based on the reported tonnage generated for disposal in 2004 in Los Angeles County of 38,980, the County would appear to have a daily refuse capacity surplus of approximately 2,300 tpd. Since 2002, waste generation in Los Angeles County has increased about two percent per year, continuing to infringe upon in-County disposal capacities. In the short term, Los Angeles County fortunately has the ability to export waste to Orange, Riverside, and Ventura Counties. In 2004, 2,308,181 tons of waste (i.e., 7,519 tpd) were exported from Los Angeles County. The "effective" waste export limits to Los Angeles County are discussed below. The "effective" tpd shown in Table 3-7 should be footnoted as likely overstated in consideration of the April 2007 closure of the Bradley landfill and the 2013 closure of the Puente Hills landfill as well as possible uncertainty of continuing exportation to neighboring counties.

The status of daily capacity within Los Angeles County has been overstated if the permitted daily maximum inflow rates for all the active landfills are used for comparison against the daily tonnage generated within the County.

In addition, it should be noted that, landfills typically receive higher volumes of waste on Monday through Friday. Lower volumes are received on Saturday, with even lower volumes received if a site is open on Sunday. When analyzing daily inflow rates it is important to segregate the "effective" and average daily waste disposal (ADWD) for Monday through Friday, from Saturday/Sunday. The permitted inflow rates for most Los Angeles County landfills are the same for each day the facility is open, except for the Puente Hills and Sunshine Canyon landfills. These sites have a daily and weekly maximum tonnage levels which lowers the amount of waste that can be received on Saturday, on weeks where waste volumes have been at or near the permitted maximum during the preceding week (Monday through Friday). For example, the Puente Hills Landfill is permitted to receive a maximum of 13,200 tpd. IN 2004, Puente Hills received an average of approximately 10,400 tons on Saturdays. The Puente Hills Materials Recovery Facility began operating in July 2005 with a capacity of 4,400 tpd. The Sunshine Canyon Landfill is currently permitted by the County to receive a maximum of 6,600 tpd or a maximum of 36,000 tons a week. Because Sunshine Canyon receives waste at or very near its daily maximum Monday through Friday, the site "effectively" can only receive 3,000 tons on most Saturdays. It should be noted that the Sunshine Canyon Landfill also received a permit to reopen and operate the City of Los Angeles portion of the landfill up to a maximum refuse inflow rate of 5,500 tons per day, or a maximum of 30,000 tons per week. Operation of the City portion of the landfill began in the summer of 2005. Additional permits are also being sought to combine and operate the facility as one large City/County landfill.

In addition to Puente Hills and Sunshine Canyon, the Chiquita Canyon Landfill has also been reaching its maximum daily inflow rate. The fact that these sites all have been or are currently receiving waste at or near their maximum permitted daily inflow rate is not surprising. All of these landfills have no restrictions on the origin of wastes accepted, except for Puente Hills. Waste has been turned away on a frequent basis at these landfills, increasing the potential for public health nuisances. The remaining two private landfills (Antelope Valley and Lancaster) have also demonstrated some ability to accept additional waste because they have no waste shed limitations.

In addition to the in-County landfills identified and described above, the Mesquite Regional Landfill located in Imperial County is a major component of the proposed Waste-by-Rail system that is intended to be available to the County (refer to discussion of "Waste by Rail" below). This landfill, located approximately five miles northeast of Glamis on Route 78 in Imperial County, will have a capacity of 600 million tons, with a life of approximately 100 years from its projected start of operations in 2008, with the waste-by-rail system forecasted to become operational in 2009. This landfill is permitted to receive non-hazardous (Class III) municipal solid waste from counties throughout southern California, including Los Angeles County.

Waste Export – Disposal Options

Out-of-County Options

Los Angeles County allows individual jurisdictions to dispose their waste at any facility, including exporting waste out-of-County, at their discretion. The following section will show that all out-of-County landfills in Southern California that are within truck haul distance (less than 150 miles) are currently limited in their ability to accept waste from Los Angeles County. This is due to one or more of the following factors:

- Existing permit conditions
- Existing or proposed ordinances
- Existing contractual agreements
- Local use of existing capacity
- Litigation

Based on a review of the current state of solid waste management in the region, both public and private agencies have had extreme difficulty permitting additional or new disposal capacity in Los Angeles County. This has forced the County to rely on out-of-County landfills to meet its short- and long-term waste disposal needs. Table 3-7 shows that available landfill capacity in the Southern California market is divided between landfills owned by public entities (e.g., local cities such as Whittier and Burbank, Orange County and the LACSD); and landfills owned or operated by private solid waste companies (e.g., Allied Waste, Republic and Waste Management). Many publicly-owned landfills do not accept waste from outside their jurisdictions.

Conversely, privately-owned landfills generally accept waste from outside the jurisdiction where they are located. In some cases the local jurisdiction controls or influences, by permit or agreement, the private landfills' ability to import waste from outside the jurisdiction, and may impose conditions or fees upon such importation.

Currently, solid waste generated for disposal in Los Angeles County is exported to Orange, Riverside, and Ventura Counties. The following discussion presents information on the status of these export sources and describes other, less preferable sources available to Los Angeles County.

Orange County: Until about five years ago, an Orange County ordinance expressly banned the import of waste into any Orange County landfill. However, as a result of the severe financial crisis caused by Orange County's bankruptcy, the County made a decision to import waste into its landfill system and transfer the profits from such importation into the County general fund. Imported waste is accepted at the Olinda Alpha, Frank R. Bowerman, and Prima Deshecha landfills. Orange County can import up to 1.2 million tons of waste per year from out-of-County and to date has approximately that amount. Approximately 60 percent (2,500 tpd) of this waste import comes from Los Angeles County.

By ordinance, Orange County is barred from entering into any new or expanded agreements for additional waste import. Orange County may import waste through the year 2015. Waste load shifting could increase the volume of export available to Los Angeles County if another entity exporting waste to Orange reduces or eliminates the volume of their exports. Conversely, the level of export available to Los

Angeles could also decrease if population growth in Orange County creates the demand for additional in-County disposal capacity.

Riverside County: A Riverside County ordinance prohibits disposal of any waste generated outside of its boundaries at any landfill in Riverside County, except at the Blythe, Eagle Mountain, and El Sobrante landfills. The only waste allowed at the Blythe Landfill is waste generated in and delivered from Arizona. The Eagle Mountain Landfill was permitted to receive waste from outside Riverside County, although the site is currently not projected to accept waste in any near term time frame. The site has been purchased by the LACSD for use by Los Angeles County. The necessary infrastructure has not yet been built in Los Angeles County to transport the waste to Eagle Mountain. In addition, litigation is also pending regarding the BLM land exchanges, the adequacy of the EIR/EIS and under valuation of the land. The Eagle Mountain site is a waste-by-rail facility, which is discussed further in this section. The El Sobrante Landfill is, therefore, the only landfill in Riverside County that may accept waste exported from Los Angeles County. The maximum daily inflow rate for out-of-County (import) waste is 7,500 tpd of the maximum 10,000 tpd.

Ventura County: Ventura County has two active landfills: the Toland Road Landfill and the Simi Valley Landfill. The Toland Road Landfill is operated by the Ventura County Sanitation Districts, and the Simi Valley Landfill is owned and operated by Waste Management. The Toland Road Landfill's Conditional Use Permit prohibits the disposal of any waste originating from outside of Ventura County, with the exception of a limited amount of waste from Santa Barbara County. The Simi Valley Landfill (private) receives approximately 500 tpd from Los Angeles County. This waste primarily originates from the waste shed in or around the Calabasas Landfill. However, the Simi Valley Landfill's Conditional Use Permit and Operating Agreement with Ventura County mandate that the vast majority of its daily capacity be reserved for Ventura County waste. It is also projected that growth within Ventura County will consume all available daily capacity within the next five to 10 years. The Simi Valley Landfill, therefore, should not be considered as a regional waste import site.

San Bernardino County: A San Bernardino County ordinance prohibits the disposal of any waste generated outside of its boundaries at any San Bernardino County landfill, except for the Colton Landfill. The Colton Landfill is located in unincorporated San Bernardino County near the City of Colton, a considerable distance from Los Angeles County. The site is owned and operated by the County of San Bernardino and was permitted to accept up to 3,100 tons of refuse per day. In the first six months of 2002, the site received an average of 1,000 tpd, with minimal amounts coming from Los Angeles County. The site has recently reached capacity and is closed and therefore not available for Los Angeles County.

Kern County: The County of Kern owns all of the solid waste landfills within Kern County. The tipping fees charged at County landfills pay for only a portion of overall site operating costs. The remaining operating costs are collected through property tax assessments. To collect all revenue required to operate its landfills, Kern County does not accept out-of-county waste for disposal at its landfills.

Waste-by-Rail

Waste-by-Rail requires local and remote infrastructure. The local infrastructure includes material recovery facilities and/or transfer stations, and rail loading facilities. The remote infrastructure includes waste unloading and transport facilities and the disposal site. There is additional capacity potentially available outside of Los Angeles County through the use of waste-by-rail at the proposed Mesquite Regional Landfill in Imperial County and the Eagle Mountain Landfill in Riverside County. Consequently, while this additional capacity will be needed, the necessary permits, infrastructure, and approvals have not yet been secured to access and/or use the facilities.

In August 2000, the LACSD entered into purchase agreements to acquire the Mesquite Regional Landfill Project in Imperial County and the Eagle Mountain Landfill Project in Riverside County, both of which are permitted to import out-of-county waste by rail. The Mesquite Regional Landfill and Eagle Mountain Landfill are the only two permitted waste-by-rail landfills in California and are the two sites the LACSD

plans to use in its waste-by-rail system. The Districts closed escrow on the Mesquite Regional Landfill in December 2002.

In the Mesquite Regional Landfill Waste-by-Rail system, the municipal solid waste is to be transported approximately 210 miles to the site via the Union Pacific Railroad main line, which extends from Metropolitan Los Angeles to Glamis and then by a proposed 4.5-mile rail spur built to the site. Upon closing escrow on Mesquite Regional landfill, a comprehensive master plan for site development was prepared. Following completion of the master plan, the District is pursuing concurrent final design and construction of the facilities necessary to begin operation. The Mesquite Regional Landfill is scheduled to be operational by the end of 2008. The Waste-by-Rail system is scheduled to be operational by the end of 2009. Both schedules are consistent with the timetables in the CUP issued by the Los Angeles County Regional Planning Commission for the Puente Hills Landfill. The Mesquite Landfill and the Eagle Mountain Landfill will only become viable waste disposal alternatives after the appropriate waste handling, transport, and landfilling infrastructure are completed.

The Puente Hills MRF was designed to handle 4,400 tpd (not to exceed 24,000 tons per week of municipal solid waste) and began operating in July 2005. The Puente Hills MRF accepts waste from select commercial loads and receives approximately 200 tons per day from select commercial waste upon a pre-approved basis or upon satisfactory inspection at the facility. However, an additional 8,000 tpd of materials recovery and rail loading capacity would still be necessary just to accommodate the waste currently being accepted at the Puente Hills Landfill.

Other permitted waste-by-rail landfills in the Western United States are located in Arizona, New Mexico, Oregon, Utah, and Washington. Currently, there has been no movement to use these more remote out-of-state sites, especially with the purchase of the Mesquite Regional and Eagle Mountain waste-by-rail landfills by the LACSD.

Remaining Refuse disposal Capacity Of Active In-County Landfills - 2004

This section presents information on the remaining refuse disposal capacity for landfills in Los Angeles County and the associated site life. The total remaining disposal capacity as of 2004 for all Los Angeles County landfills does not include the Pebbly Beach, Brand Park and San Clemente Landfills. Pebbly Beach is located on the Island of Catalina handling on a limited portion of the island's waste. The San Clemente Landfill is owned and operated by the United States Navy and is only for their use. Both facilities have extremely limited disposal capacity remaining. Based on the CIWMB website, the Brand Park Landfill has no remaining capacity. The remaining disposal capacity was obtained for the CIWMB website data base. The conversion from waste volume in cubic yards to tons was calculated from information obtained from the 2004 Annual Report on the Countywide Summary Plan and Countywide Siting Element prepared the by the Los Angeles County Department of Public Works. The resulting remaining Class III refuse disposal capacity as of December 31, 2004 was calculated to be 102.89 million tons. Based on 2004 waste generation rates, the County has a little over seven years of capacity (i.e., 2013). However, this simple comparison does not accurately predict when a shortfall in daily permitted disposal capacity will be experienced.

In 2004, the approximate total disposal quantity distribution (of solid waste originating within the County) among the various types of disposal facilities is reflected below.

In-County Class III landfills	9,110,300 tons
Transformation facilities	548,300 tons
Exports to Out-of-County Class III landfills	2,308,200 tons
Unclassified landfills (inert waste only)	1,247,300 tons
Total Disposed	13,214,300 tons

As indicated in the 2004 Annual Report, projecting future shortfalls or excess disposal capacity is an estimate at best. The County is currently revising the Countywide Siting Element. As part of this revision process, the County will be evaluating possible updates to the Siting Elements' goals and policies, and removing Elsmere Canyon and Blind Canyon Landfills from the list of potential new landfill sites. It is estimated that the Siting Element revision will be completed in 2007.

As indicated in the information presented in this section and reflected in the 2004 Annual Report, there is a need to develop substantial out-of-county disposal capacity as soon as possible and the in-County infrastructure (e.g., transfer stations/material recovery facilities, inter-modal facilities, etc.) necessary to access such capacity. Concurrently, jurisdictions countywide must also continue to intensify their efforts to encourage development of conversion technologies to manage the solid waste generated within their boundaries.

Summary

Waste export is currently only being sent to three neighboring counties, Orange, Riverside and Ventura Counties. Based on Los Angeles County's ability to utilize only a select number of facilities within these counties combined with the in-County landfill capacity, it appears that adequate daily and total refuse capacity is available. However, the current site and/or County-specific conditions and/or limitations effectively reduce the ability to dispose of Los Angeles County waste within as well as outside the County. Without additional landfill capacity, future demands created by pending landfill closures and continued growth and development within the region may not be met. Closure of the Bradley and Puente Hills Landfills alone will reduce the "effective" daily disposal capacity within the County to less than 28,000 tpd by 2013 (vs. 29,675 tpd 2004 in-County need from Table 3-7). In addition, the ability to continue current exports to Orange County may expire by 2015, which will place another 2,500 tpd into the Los Angeles County disposal system. Growth in Orange, Riverside, and Ventura Counties has increased significantly, which threatens their ability to continue acceptance of out-of-county waste in the near future. Further, it is important to understand that the utilization of out-of-County facilities, which may be located at greater distances than in-County landfills, may have potentially serious fiscal and environmental consequences, including: (1) increased transportation and disposal costs; (2) loss of revenue to the County; and (3) increased traffic, noise, air quality and related impacts associated with the increase in vehicles miles traveled. The lack of assurance that facilities as well as capacities will be available in neighboring counties, coupled with in-County site closures and continuing growth in Southern California, indicate real potential for a short-fall in the "effective" daily tonnage capacity to serve the near term disposal needs of Los Angeles County.

3.5 Description of the Proposed Project

The Lancaster Landfill and Recycling Center (LLRC) is an existing Class III non-hazardous municipal solid waste landfill facility owned and operated by Waste Management of Lancaster, the project applicant. The landfill area encompasses the existing 82-acre active area, the 62-acre Western Area, which is currently used as a borrow area, the 112-acre Eastern Area, which is presently undeveloped, and a 20-acre area, which is occupied by facilities that are ancillary to the landfill. At the present time, the Lancaster Landfill is operating under Solid Waste Facilities Permit (SWFP) No. 19-AA-0050, which permits the acceptance of 1,700 tons of municipal solid waste at the site on a daily basis.

The LLRC generally serves the Lancaster/Palmdale area and surrounding areas (i.e., Quartz Hill, Antelope Acres, Lake Los Angeles, Pear Blossom and other unincorporated Los Angeles County areas). Waste is also received from Edwards Air Force Base, Acton, Wrightwood, and Gorman. In addition, waste can be delivered from the City of Los Angeles as well as Los Angeles, Kern, San Bernardino, Riverside, and San Diego Counties.

The project applicant is seeking a revision to the existing Conditional Use Permit issued by the County of Los Angeles, and issuance of a revised SWFP from the LEA after concurrence by the CIWMB. The proposed revisions, if approved, will increase the maximum allowable daily intake volume for municipal

solid waste from 1,700 tons per day (tpd) permitted to 3,000 tpd, with additional inflow of soil, green/wood waste, and recyclable and beneficial use materials at the LLRC. Additional acceptance and processing of green/wood waste is also planned. Further, neither the horizontal footprint, which encompasses approximately 209 acres, nor the maximum vertical elevation, (i.e., 2,400 feet above mean sea level) will be affected by the proposed amendment. No other modifications are proposed to the LLRC, which will continue to be operated as a Class III facility under the existing permit conditions and mitigation measures.

In addition to the revisions to the Conditional Use Permit and SWFP, the proposed project requires a Finding of Conformance from the Los Angeles County Integrated Waste Management Task Force, in accordance with the Los Angeles County Countywide Integrated Waste Management Plan (CIWMP), which was approved by the California Integrated Waste Management Board on June 23, 1999. The County Siting Element, which is an element of the Los Angeles County CIWMP, requires that all new and expansion of existing solid waste disposal facilities be consistent with its goals, policies, and siting criteria.

The LLRC currently (November 2005) has a remaining air space of approximately 17,860,810 cubic yards. Based on the current waste disposal rates at the landfill increasing to 3,000 tons per day maximum, it is estimated that the landfill will reach its current permitted capacity in approximately 15 years (2021).

3.6 Project Objectives

The County of Los Angeles adopted an Integrated Solid Waste Management Plan (CIWMP), which articulates the County's objectives for solid waste management. In general, the County's goals and objectives include providing adequate landfill capacity to accommodate future growth and development and to manage solid waste in the County through a reasonable balance of public and private operations and facilities, including its regional public landfill system. Other goals and objectives include the County's intent to implement recycling and related reuse programs in an effort to reduce the generation of solid waste. In general, project implementation is intended to provide for an increase in the maximum daily capacity at the Lancaster Landfill and Recycling Center to further service waste disposal needs within the County of Los Angeles. The increase in daily tonnage proposed by the applicant will provide daily landfill capacity sufficient to serve the needs for both existing and future residents and businesses. The specific objectives of the proposed project, which supplement the objectives identified for the prior landfill expansion project that addressed increased refuse capacity with minimum impacts to the environment, include:

- Authorize an increase in daily refuse handling capacity at an existing in-county landfill to accommodate future projected population growth and waste load shifting within Los Angeles County.
- Provide a regional resource within the Lancaster area that is available for both local and County waste disposal for at least 15 years.
- Decrease the amount of dependence on out-of-county waste disposal and long-haul options of waste by increase in in-county disposal options, and thereby avoiding adverse regional air quality and traffic impacts.
- Minimize the impacts of solid waste disposal through a well-engineered and environmentally sound operation.
- Dispose of refuse in an existing landfill and relatively isolated area thus efficiently utilizing land space.

3.7 Project Processing Requirements and Requested Entitlements

The proposed request to increase the daily refuse intake at LLRC will require new permit approvals from several regulatory agencies, including but not limited to:

- Replacement of Conditional Use Permit No. 93-070-(5) issued by the Regional Planning Commission of Los Angeles County.

- Revision to Solid Waste Facilities Permit No. 19-AA-0050, issued by the Los Angeles Department of Health Services/LEA after concurrence from the CIWMB.

CHAPTER 4.0
ENVIRONMENTAL ANALYSIS

INTRODUCTION

This section documents the environmental analysis for those parameters for which the proposed amendment to the Lancaster Landfill Conditional Use Permit may or would result in potentially significant adverse impacts. These parameters were identified based on the environmental analysis presented in the Initial Study contained in Appendix A of this Draft EIR.

The purpose of Chapter 4.0 (Environmental Analysis) is to describe the existing local and regional environmental conditions and to identify the potentially significant impacts that may occur as a result of the proposed project. In order to facilitate the analysis of each issue in this EIR, a standard format was developed to analyze each issue thoroughly. This format is presented below with a brief discussion of the information included within each topic.

Existing Environmental Setting

This introductory section describes the existing environmental conditions related to each issue analyzed in the Draft EIR. In accordance with Section 15125 of the State CEQA Guidelines, both the local and regional settings are discussed as they exist prior to implementation of the proposed project. The existing conditions provide the basis against which the potential environmental impacts are evaluated or, where appropriate, the permitted levels of operation.

Significance Criteria

Specific criteria have been identified upon which the significance of project-related potential impacts are determined. The significance criteria which are the basis of the environmental analysis contained in the Draft EIR are derived from the significant effects presented in Appendix G of the State CEQA Guidelines, adopted local, State, and federal policies and programs which may apply, and other commonly accepted technical and non-technical standards.

Analysis of the Proposed Project

This section of the Draft EIR identifies and describes the potential impacts, both adverse and beneficial, which will result from project implementation. All project-related impacts have been clearly and adequately analyzed in accordance with Section 15126 of the State CEQA Guidelines. Impacts, which have been avoided or reduced to a level of insignificance, are identified as "insignificant" and analyzed accordingly. In order to facilitate the impact analysis, the following outline has been utilized.

- Potential Effects of Project Found to be Insignificant
- Potential Effects of Project Found to be Significant

Mitigation Measures

Where a potential significant environmental effect has been identified in the environmental analysis, mitigation measures have been included in this section of the document which ". . .

minimize significant adverse impacts . . . for each significant environmental effect identified in the EIR", as prescribed in Section 15126 of the State CEQA Guidelines.

Unavoidable Significant Adverse Impacts

Unavoidable significant adverse impacts are those effects that either cannot be mitigated or they remain significant even after mitigation. Prior to approval of a proposed project where significant and unavoidable impacts are found, the Los Angeles County Planning Commission is required to adopt a Statement of Overriding Considerations that identifies and describes the public benefit(s) associated with project implementation that offset the significant impacts, if such impacts occur. In the case of the proposed project, the analysis presented in Section 4.2 of the Draft SEIR concluded that potentially significant unavoidable adverse cumulative air quality impacts may occur, necessitating the adoption of a Statement of Overriding Considerations.

4.1 TRAFFIC AND CIRCULATION

Summary of Traffic Analysis for EIR SCH No. 1993101036

A detailed traffic impact study was prepared by DKS Associates in December 1996 to analyze the potential traffic impacts of the lateral expansion of the LLRC. A total of 13 intersections and 13 roadways segments were analyzed in that study, which concluded that all of the study locations operated at satisfactory levels of service (i.e., LOS A) during the analyzed time periods (i.e., daily, morning and afternoon peak hours). Further, under all of the future (i.e., Year 2010) scenarios (existing plus ambient growth (with and without the proposed project) and Cumulative (with and without the project), all of the study locations were projected to operate at an acceptable level of service (i.e., LOS A) during the same analyzed time periods. Using the criteria established for that study, it was concluded that the net traffic generated by the landfill expansion project would not have a significant impact at any of the analyzed locations. Furthermore, traffic signal warrants were not met at any of the analyzed intersections. However, the 1996 study did determine that traffic generated by the expansion of the LLRC would cause potentially significant impacts to the pavement structure along two roadway segments: (1) Avenue F between Division Street and 10th Street East; and (2) 10th Street East between Avenue F and Avenue G. The results of the analysis indicated that the existing pavement design could not adequately accommodate truck traffic in the area (either with or without the implementation of the expansion project). Addition of the project-generated truck traffic would further aggravate the existing and projected inadequacy. As a result, a mitigation measure was prescribed for the expansion project that required a contribution towards the reconstruction of the pavement and thickening of the base/sub base to allow for an acceptable "Traffic Index" for the pavement.

Current Traffic Analysis

The discussion and analysis that follow summarizes the findings of a detailed traffic and pavement analysis prepared by Linscott, Law & Greenspan, Engineers (LLG) in October 2005 (Revised October 2, 2006). The scope of the traffic analysis was determined after meetings with Los Angeles County Department of Public Works (Traffic and Lighting Division) and the California Department of Transportation. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach, and conform to LACDPW's *Traffic Impact Analysis Report Guidelines* (dated January 1, 1997), which prescribes the use of the Intersection Capacity Utilization (ICU) methodology to determine the volume-to-capacity relationships for signalized intersections. By using 1,600 vehicles per hour per lane as the practical capacity for through lanes, left-turn, and right-turn lanes, and a dual left-turn lane capacity of 2,880 vehicles per hour for the two lanes, the ICU methodology directly relates traffic demand to the available capacity. There have been no changes in circumstances or new information identified that would alter the conclusions or methodology used in the traffic analysis.

The traffic analysis prepared for the proposed project evaluated the traffic impacts at eight "key" study intersections as well as potential impacts on pavement integrity along four roadways surrounding the project site. The traffic and pavement analysis is based primarily on the proposed increase in the allowable daily intake volume of municipal solid waste from 1,700 tons per day (tpd), exclusive of the additional inflow of soil, green waste, and recyclable and beneficial use materials that is currently permitted, to 3,000 tpd, with additional inflow of soil, green/wood waste, and recyclables and beneficial use materials (as currently permitted) at the Lancaster Landfill and Recycling Center. In addition, the traffic impact analysis also included an assessment of the level of service at five freeway mainline segments. This section of the Draft EIR summarizes the existing characteristics and traffic volumes on roadways and intersections in the study area, vehicular traffic anticipated to be generated by the project, potential impacts of the additional vehicle trips generated by the project on the surrounding street system, cumulative impacts, and potential mitigation measures that are intended to reduce project-related impacts to an acceptable level. The traffic analysis prepared by LLG is included in Appendix B of this document.

4.1.1 Existing Conditions

Access and Circulation Network

Regional access to the Lancaster Landfill and Recycling Center is provided via the Antelope Valley Freeway (SR-14), which extends through the project area in a north-south direction approximately 1.5 miles west of the subject property. This freeway provides access to the project site via grade-separated interchanges, which exist at Avenues F, G, and H. The principal local network of streets serving the project includes Avenue F, Avenue G, Avenue H, Sierra Highway, Division Street, and 10th Street East (Challenger Way). The proposed project site and surrounding circulation system are described below and are illustrated on Figure 4.1-1.

East-West Roadways

Avenue F is a two-lane discontinuous roadway (11-foot lanes) that forms the northern boundary of the project site. Avenue F has a full interchange (half cloverleaf) with the Antelope Valley Freeway (SR-14). In the long-range planning effort, it is assumed that this roadway would be connected between Sierra Highway and Division Street.

Avenue G is a two-lane roadway located south of the project site, with 11-foot travel lanes and undeveloped shoulders. This roadway has a full (half cloverleaf) interchange at SR-14, providing regional connections to the north and south. Currently, Avenue G is closed to through traffic west of SR-14 due to construction.

Avenue H is grade-separated (i.e., flyover) at Sierra Highway, and has four eastbound lanes and three westbound lanes. East of SR-14, Avenue H consists of one westbound lane with undeveloped shoulders and three eastbound lanes with developed shoulders. East of Division Street, Avenue H exists as a two-lane roadway with unpaved shoulders. Avenue H also has a full (half cloverleaf) interchange with SR-14.

Avenue I is a four-lane east-west roadway. Between 30th Street West and 20th Street West, Avenue I provides four travel lanes. Between 20th Street West and 10th Street West, Avenue I widens to six travel lanes.

North-South Roadways

Sierra Highway is a two-lane, north-south roadway. Left-turn pockets are provided in both directions on Sierra Highway at Avenue G. There is a northbound left-turn pocket at Avenue G-12, which provides access to Avenue H from Sierra Highway. North of Avenue I, Sierra Highway is a four-lane roadway.

Division Street provides one lane in each direction, with undeveloped shoulders north of Avenue H-8. Between Avenue I and Avenue H-8, there are two travel lanes in each direction.

10th Street East (Challenger Way) is currently improved with two 11-foot travel lanes and undeveloped shoulders in the vicinity of the Lancaster Landfill and Recycling Center.

Figure 4.1-2 illustrates the existing physical characteristics of the circulation systems serving the existing Lancaster Landfill.

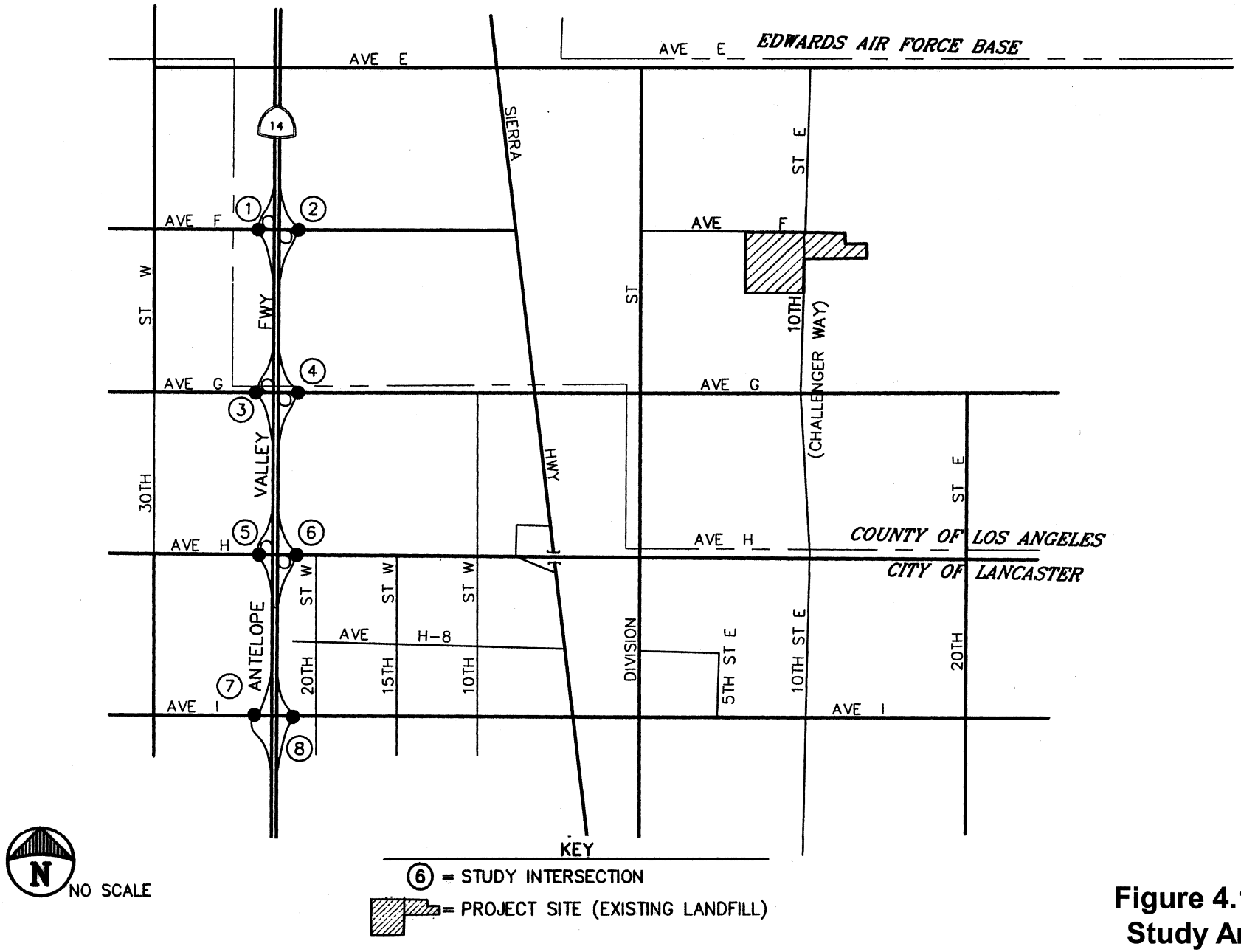


Figure 4.1-1
Study Area

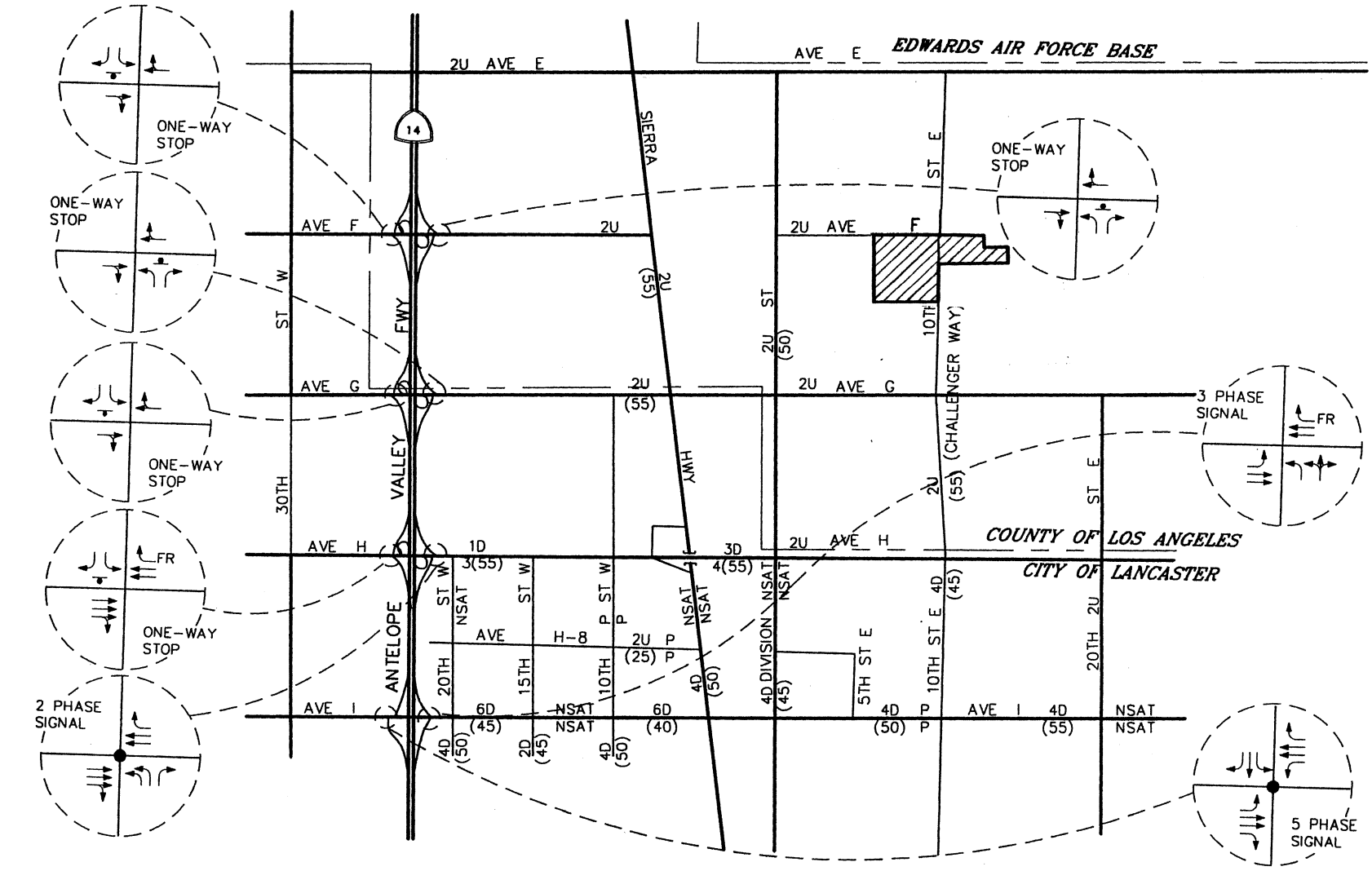


Figure 4.1-2
Existing Roadway and Intersection Characteristics

Existing Intersection Operating Conditions

As indicated above, eight "key" study intersections were analyzed, including:

- Avenue F/SR-14 Southbound Ramps
- Avenue F/SR-14 Northbound Ramps
- Avenue G/SR-14 Southbound Ramps
- Avenue G/SR-14 Northbound Ramps
- Avenue H/SR-14 Southbound Ramps
- Avenue H/SR-14 Northbound Ramps
- Avenue I/SR-14 Southbound Ramps
- Avenue I/SR-14 Northbound Ramps

Five of the eight intersections are currently stop-controlled/unsignalized; the Avenue H/SR-14 Northbound Ramps, Avenue I/SR-14 Northbound Ramps, and Avenue I-SR-14 Southbound Ramps are "key" intersections that are signalized. Existing a.m. and p.m. peak hour traffic volumes are illustrated on Figures 4.1-3 and 4.1-4, respectively. As indicated in Table 4.1-1, each of the "key" study intersections is currently operating at an acceptable level of service (i.e., Level of Service D or better) during both the a.m. and p.m. peak hours.

Table 4.1-1

Existing Intersection Peak Hour LOS
Lancaster Landfill and Recycling Center

Key Intersection[1]	AM Peak Hour		PM Peak Hour		Acceptable LOS
	ICU	LOS	ICU	LOS	
Avenue F/SR-14 SB Ramps	0.14	A	0.20	A	Yes
Avenue F/SR-14 NB Ramps	0.13	A	0.20	A	Yes
Avenue G/SR-14 SB Ramps	0.16	A	0.18	A	Yes
Avenue G/SR-14 NB Ramps	0.19	A	0.19	A	Yes
Avenue H/SR-14 SB Ramps	0.21	A	0.28	A	Yes
Avenue H/SR-14 NB Ramps	0.20	A	0.26	A	Yes
Avenue I/SR-14 SB Ramps	0.43	A	0.50	A	Yes
Avenue I/SR-14 NB Ramps	0.49	A	0.72	C	Yes

[1]All analyzed intersections are currently stop-controlled, except for Avenue H/SR-14 NB Ramps, Avenue I/SR-14 NB Ramps, and Avenue I/SR-14 SB Ramps. Based upon LACDPW Traffic Division staff's direction, all key intersections were analyzed as if they were signalized.

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

At the present time, 232 trucks per day enter and exit the LLRC. Most of these vehicles are those hauling municipal solid waste (186); only 46 vehicles that access the LLRC are hauling recycling materials. The capacity of each truck/vehicle varies, depending on its type and function. The capacities of the vehicles hauiing municipal solid waste range from 600 pounds (i.e., MSW in pickups and cars) to 5 tons for other trucks to 22 tons for transfer trailers. Capacities of the vehicles hauling recycling materials range from 1.2 tons (other recyclables) to 25 tons (contaminated soils). East/west truck/haul routes include Avenue G and Avenue H; north/south routes used by haul vehicles include the Antelope Valley Freeway, Division Street, and 10th Street East.

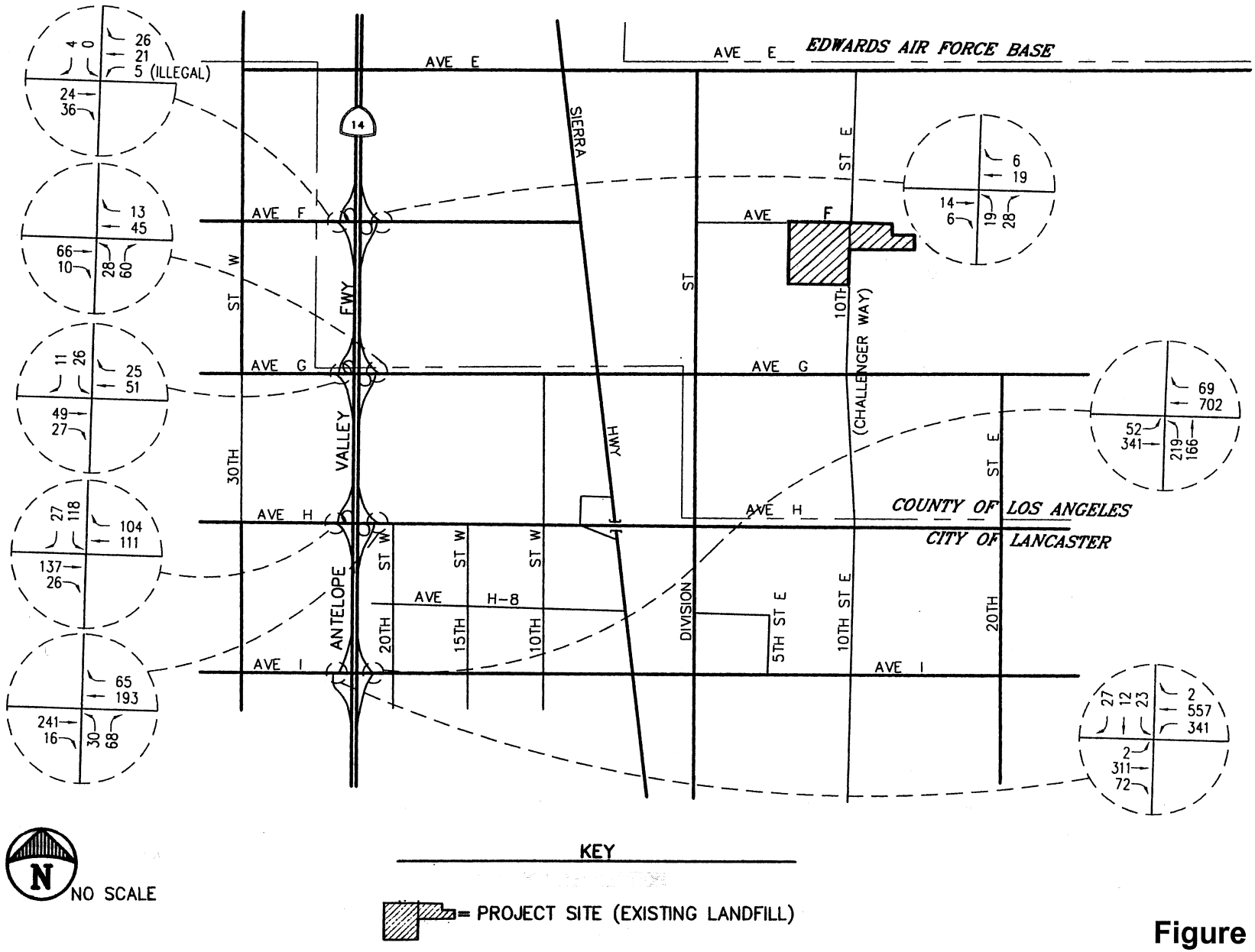


Figure 4.1-3
Existing Year 2005 AM Peak Hour Traffic Volumes

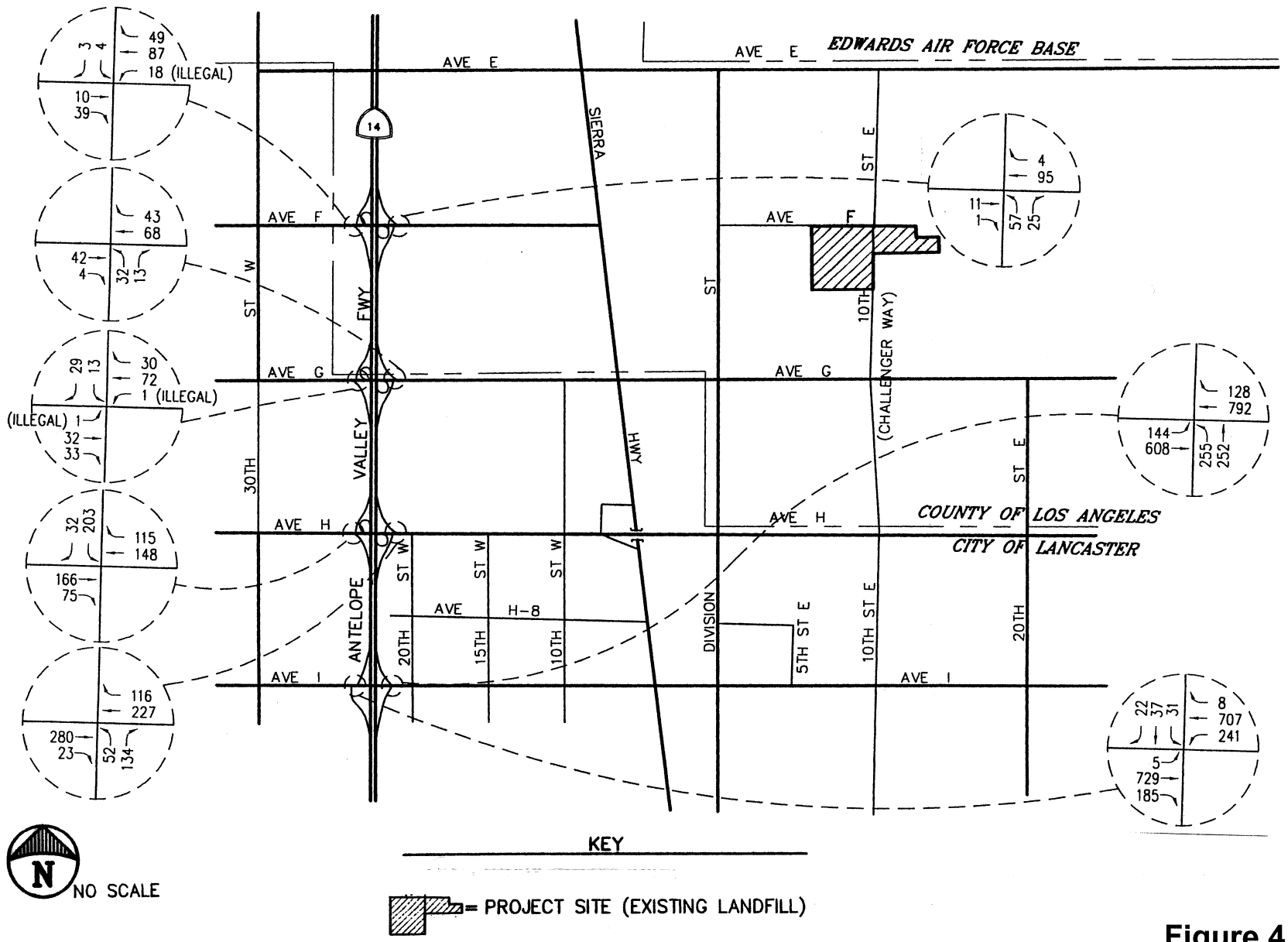


Figure 4.1-4
Existing Year 2005 PM Peak Hour Traffic Volumes

Existing Freeway Mainline Levels of Services

Table 4.1-2 reflects the results of the existing freeway mainline level of service analysis conducted for the proposed project. As indicated in the table, all of the freeway segments addressed in the traffic analysis are currently (2005) operating acceptable levels of service (i.e., LOS D or better), based on the assumed freeway capacity of 76,500 vehicles per day for a four-lane freeway segment.

Table 4.1-2

Existing Freeway Mainline Levels of Service
Lancaster Landfill and Recycling Center

SR-14 Freeway Segment	Existing Daily Volume	Volume/Capacity Ratio[1]	Level of Service
SR-14 Freeway North of Avenue F	36,330	0.47	A
SR-14 Freeway Between Avenue F and Avenue G	37,887	0.50	A
SR-14 Freeway Between Avenue G and Avenue H	38,925	0.51	A
SR-14 Freeway Between Avenue H and Avenue I	39,963	0.52	A
SR-14 Freeway South of Avenue I	47,748	0.62	B

[1]Freeway capacity of 76,500 vehicles per day (vpd) based on a 4-lane freeway segment was applied.

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

Existing Roadway Segment Operating Conditions

In addition, four roadway segments surrounding the Lancaster Landfill and Recycling Center were evaluated to establish the existing integrity of the pavement. As presented in Table 4.1-3, the existing truck volumes on three roadway segments along Avenue F, Division Street, and 10th Street East exceed the design traffic index (TI), indicating that the existing pavement design cannot adequately accommodate existing truck traffic along those roadway segments. Although this effect does not necessarily result in an impact to the physical environment, it is, nonetheless, an effect that the project applicant recognizes and is willing to help mitigate. Since the design TI for the Avenue G segment is unknown, it is not certain how the existing truck traffic affects the pavement integrity of what that roadway segment was designed for.

Table 4.1-3

Existing (2005) Pavement Integrity
Lancaster Landfill and Recycling Center

Roadway Segment	10-Year Design Traffic Index[1]	Daily No. of Trucks	10-Year Total ESAL[2]	Traffic Index
Avenue F between Division Street and 10th Street East	8	492	905,280	9.0
Division Street between Avenue F and Avenue G	7.5	532	978,880	9.0
10th Street East between Avenue F and Avenue G	5.5	209	384,560	8.0
Avenue G between Division Street and 10th Street East	N/A	471	866,640	9.0

[1]Design Traffic Indices (TI) provided by LACDPW staff where available.
[2]As contained in the Caltrans Highway Design Manual (July 1995), the ESAL 10-Year constant is 1,840 (3-axle trucks).

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

4.1.2 Significance Criteria

Criteria for determining potentially significant project-related traffic impacts have been established by the County of Los Angeles. Based upon County traffic study guidelines, the project is considered to have a significant project-related impact if the following criteria are met:

Without Project		With Project ICU Increase
Level of Service	ICU	
C	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

4.1.3 Potential Impacts

4.1.3.1 Impacts Determined to be Less than Significant

Trip Generation and Distribution

Project implementation will result in an increase of 97 additional truck loads per day (refer to Table 4.1-4a), based on the proposed increase in daily refuse accepted at the landfill from the existing daily refuse "inflow" to 3,000 tpd (i.e., proposed maximum daily "inflow") and on the proposed increase in green waste for daily cover and beneficial use. Although the anticipated increase in traffic is primarily for refuse and green waste, other inflow categories may fluctuate on a "day-to-day" basis, as long as the total traffic increase does not exceed 97 loads. Trips not included in the analysis are those created by pick-up and delivery of empty trash bins stored on-site as these trips are part of existing operations and will not change from the existing baseline condition with project implementation. The proposed increase is due to the use of more transfer trailers and fewer other truck types, which reflects the general trend in the waste management industry towards using larger transfer trucks. Table 4.1-4a reflects the average increase in tonnage and resulting increase in loads arriving at the Lancaster Landfill. The anticipated "peak tonnage" increases are reflected in Table 4.1-4b.

Table 4.1-4a

Potential Average Tonnage Increase
Lancaster Landfill and Recycling Center

Description	Existing Operations[a]					Future (New CUP)[b]		Net Change	
	1 Tons	2 Loads	3 Tons/Load[1]	4 Tons/Day[2]	5 Loads/Day[3]	6 Tons/Day	7 Loads/Day[4]	8 Tons/Day[5]	9 Loads/Day[6]
Municipal Solid Waste (MSW)									
MSW in Transfer Trailers	23,465	1,085	21.6	460	21	2,370	110	1,910	89
MSW in Other Trucks	33,159	6,350	5.2	650	125	620	119	-30	-6
MSW in Pickups/Cars	612	2,040	0.3	12	40	10	33	-2	-7
Sub-Total	**57,236**	**9,475**	--	**1,122**	**186**	**3,000**	**262**	**1,878**	**76**
Recycling									
Recyclables in Trucks	3,010	707	4.3	59	14	59	14	0	0
Cover Soil in Trucks	3,081	323	9.5	60	6	60	6	0	0
Contaminated Soils in Trucks	8,992	359	25.0	176	7	176	7	0	0
Green waste in Haul Trucks	2,400	883	2.7	47	17	47	17	0	0
Green waste in Transfer Trailers	0	0	21.6	0	0	450	21	450	21
Other Recyclables in Trucks	123	106	1.2	2	2	2	2	0	0
Sub-Total	**17,606**	**2,378**	--	**344**	**46**	**794**	**67**	**450**	**21**
Total	**74,842**	**11,853**	--	**1,466**	**232**	**3,794**	**329**	**2,328**	**97**

[a]Average tonnage and load data are based on counts performed by Waste Management at Lancaster Landfill between January 1, 2003 and March 1, 2003 (corresponds to a period of 51 days of operations).
[b]Future tonnage (i.e., tons per day) projected by Waste Management.

[1]Column 1 ÷ Column 2
[2]Column 1 ÷ 51 Days
[3]Column 2 ÷ 51 Days
[4]Column 6 ÷ Column 3
[5]Column 6 - Column 4
[6]Column 7 - Column 5

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

Table 4.1-4b

Projected Peak Tonnage Increase
Lancaster Landfill and Recycling Center

Description	Existing Operations[a]			Future[b]		Net Change	
	1 Tons/Day	2 Tons/Load	3 Loads/Day[1]	4 Tons/Day	5 Loads/Day	6 Tons/Day[2]	7 Loads/Day[3]
Municipal Solid Waste (MSW)							
MSW in Transfer Trailers	1,038	21.6	48	2,370	110	1,332	62
MSW in Other Trucks	650	5.2	125	620	119	-30	-6
MSW in Pickups/Cars	12	0.3	40	10	33	-2	-7
Sub-Total	**1,700**	**-**	**213**	**3,000**	**262**	**1,300**	**49**
Recycling							
Recyclables in Trucks	59	4.3	14	59	14	0	0
Cover Soil in Trucks	250	9.5	26	250	26	0	0
Contaminated Soil in Trucks	1,250	25.0	50	1,250	50	0	0
Greenwaste in Haul Trucks	47	2.7	17	47	17	0	0
Greenwaste in Transfer Trailers	0	21.6	0	500	23	500	23
Other Recyclables in Trucks	2	1.2	2	2	2	0	0
Sub-Total	**1,608**	**-**	**109**	**2,108**	**132**	**500**	**23**
Total	**3,308**	**-**	**322**	**5,108**	**394**	**1,800**	**72**

[a]Peak tonnage (i.e., tons per day) estimated by Waste Management based on counts performed between January 1, 2003 and March 1, 2003 (corresponds to a period of 51 days of operations). Tons/Load ratios based on Table 4.1-4a.
[b]Future tonnage (i.e., tons per day) projected by Waste Management.

[1]Column 1 ÷ Column 2
[2]Column 4 - Column 1
[3]Column 5 - Column 3

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

The 97 loads per day increase resulting from the proposed increase in tonnage inflow, and over existing average acceptance levels, was converted to passenger car equivalents (PCE) in order to calculate the project-related trips. The 97 loads/vehicles equates to 194 "two-way" trips. Based on a PCE factor of 2.0, the 194 two-way trips converts to 388 PCE trips per day (Los Angeles County Traffic Impact Study guidelines and MOU with Los Angeles County Public Works staff). With the addition of the employee and visitor trips, the total addition trips generated by the proposed project is 408. Daily and peak hour trips have been calculated and are reflected in Table 4.1-5.

Table 4.1-5

Project Trip Generation Estimates
Lancaster Landfill and Recycling Facility

Project Component	Daily	AM Peak Hour			PM Peak Hour		
		In (15%)	Out (7%)	Total	In (8%)	Out (10%)	Total
Truck-Related PCE Trips[1]	388	29	16	45	16	17	33
Employee and Visitor Trips[2]	20	18	2	20	2	18	20
Net Additional Trips	**408**	**47**	**18**	**65**	**18**	**35**	**53**

[1]Truck generation based on 97 trucks per net increase in loads/day x 2 trips/vehicle x 2.0 PCE factor.
[2]Employee/visitor trips based on 5 employees + 5 visitors x 2 trips/day

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

The 388 daily two-way trips estimated for the proposed project will utilize the circulation system currently used by refuse vehicles to access the Lancaster Landfill and Recycling Center. Two potential circulation scenarios are illustrated in Figure 4.1-5 (without Avenue F Extension) and Figure 4.1-6 (with Avenue F Extension). Distribution of the project-related traffic is illustrated in each of these scenarios. As can be seen by comparing the information in those figures, the only difference is that if Avenue F is extended between Division Street and Sierra Highway, one percent of the traffic generated by the proposed project will utilize SR-14 north of Avenue F. No other changes in distribution would occur as a result of the Avenue F extension. Project-related a.m. and p.m. peak hour traffic volumes are illustrated in Figure 4.1-7 and 4.1-8 (without Avenue F Extension) and Figures 4.1-9 and 4.1-10 (with Avenue F Extension).

The traffic analysis evaluated the "average" trips anticipated to occur at the LLRC as a result of the proposed project. As previously indicated, the average trips reflect "normal" operations at the landfill. In addition, it is anticipated that there would be occurrences of "peak" trip generation, which is associated with heavier than normal truck activities due to loads of demolition debris, cover soils, green waste, etc., that are brought to the LLRC. These activities currently take place at the LLRC. While these "peak" days are infrequent, they result in an increased number of vehicles entering and leaving the LLRC. Therefore, both the average and "peak" traffic scenarios were evaluated in the traffic analysis to ensure that the roadways and key intersections can accommodate the "peak" traffic conditions. Based on that analysis, it was determined that all of the key intersections are forecast to operate at adequate levels of service (i.e., LOS "C" or better).

As previously discussed, certain days may have higher volumes of soils, green/wood waste and materials used for beneficial use. The potential peak tonnage that may occur is reflected in Table 4.1-4b. As indicated in that table, peak operations that may occur at the landfill would result in an additional 72 loads per day in the future. However, all of the key study area intersections are forecast to operate at LOS A during both the a.m. and p.m. peak hours. As a result, the infrequent increase in daily haul trucks would not result in any changes to the anticipated operational levels of service and no significant impacts would occur as a result of the "peak" loads identified in Table 4.1-4b.

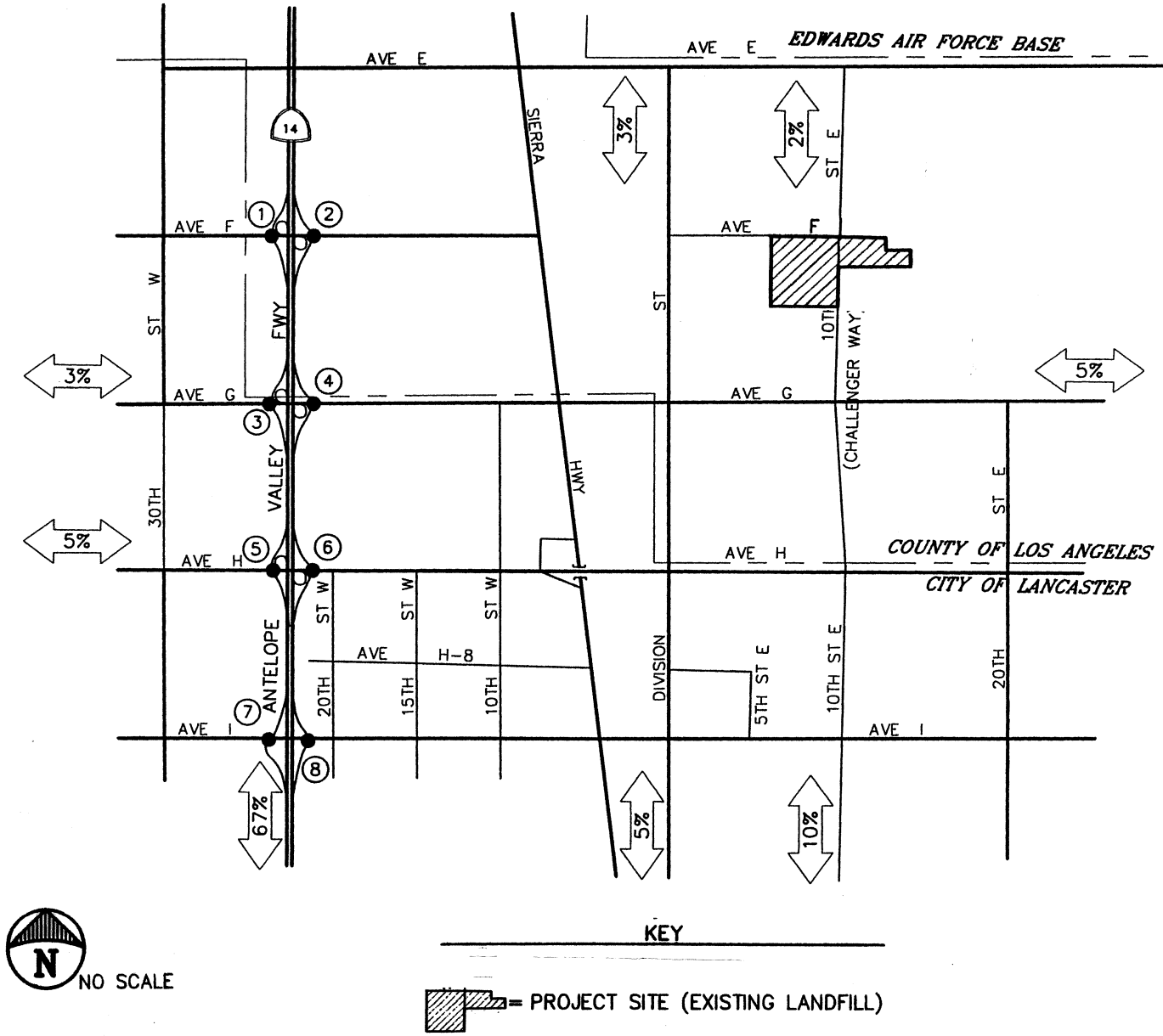


Figure 4.1-5
Project Traffic Distribution (Without Avenue F Extension)

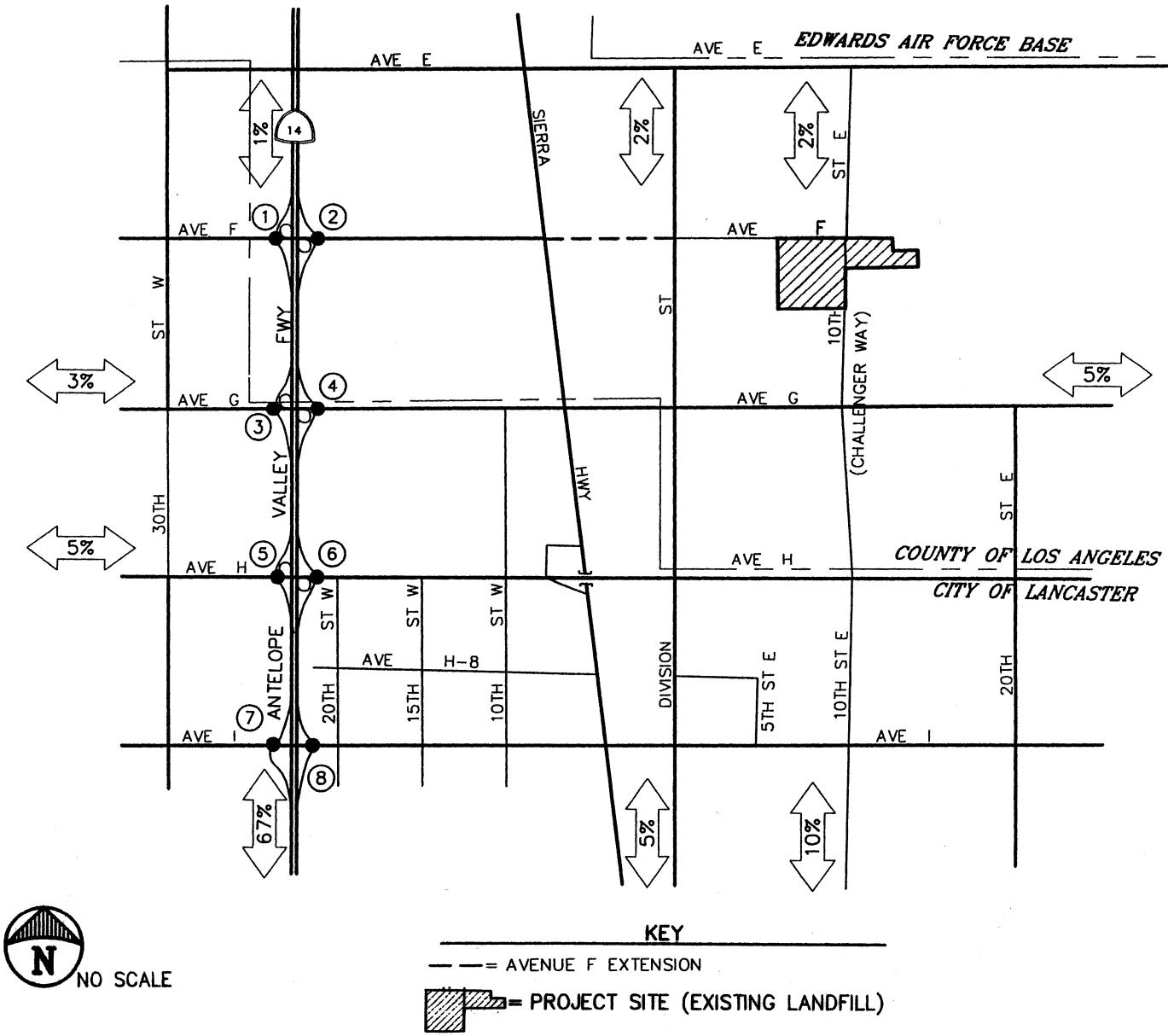


Figure 4.1-6
Project Traffic Distribution (With Avenue F Extension)

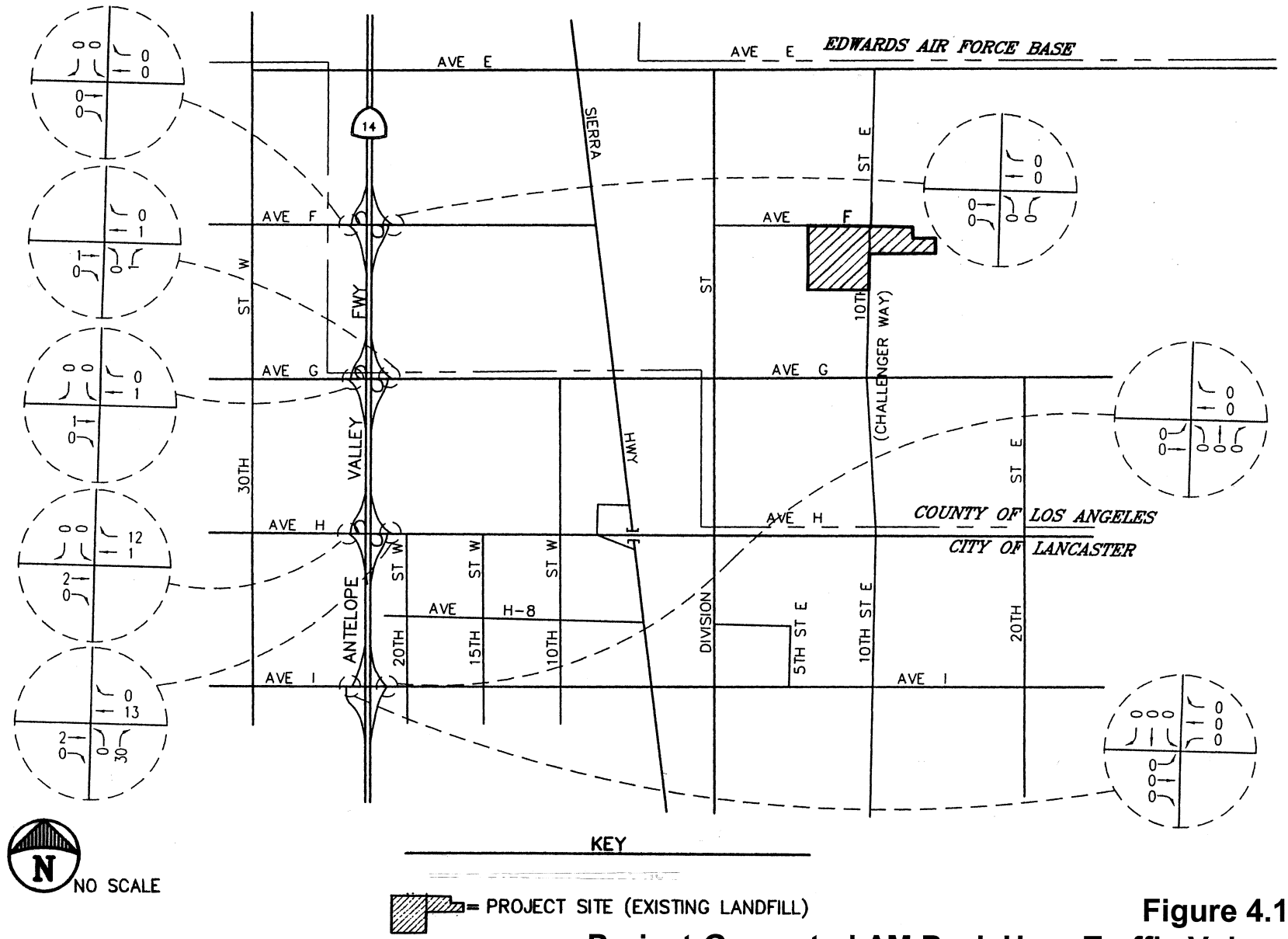


Figure 4.1-7
Project-Generated AM Peak Hour Traffic Volumes
(Without Avenue F Extension)

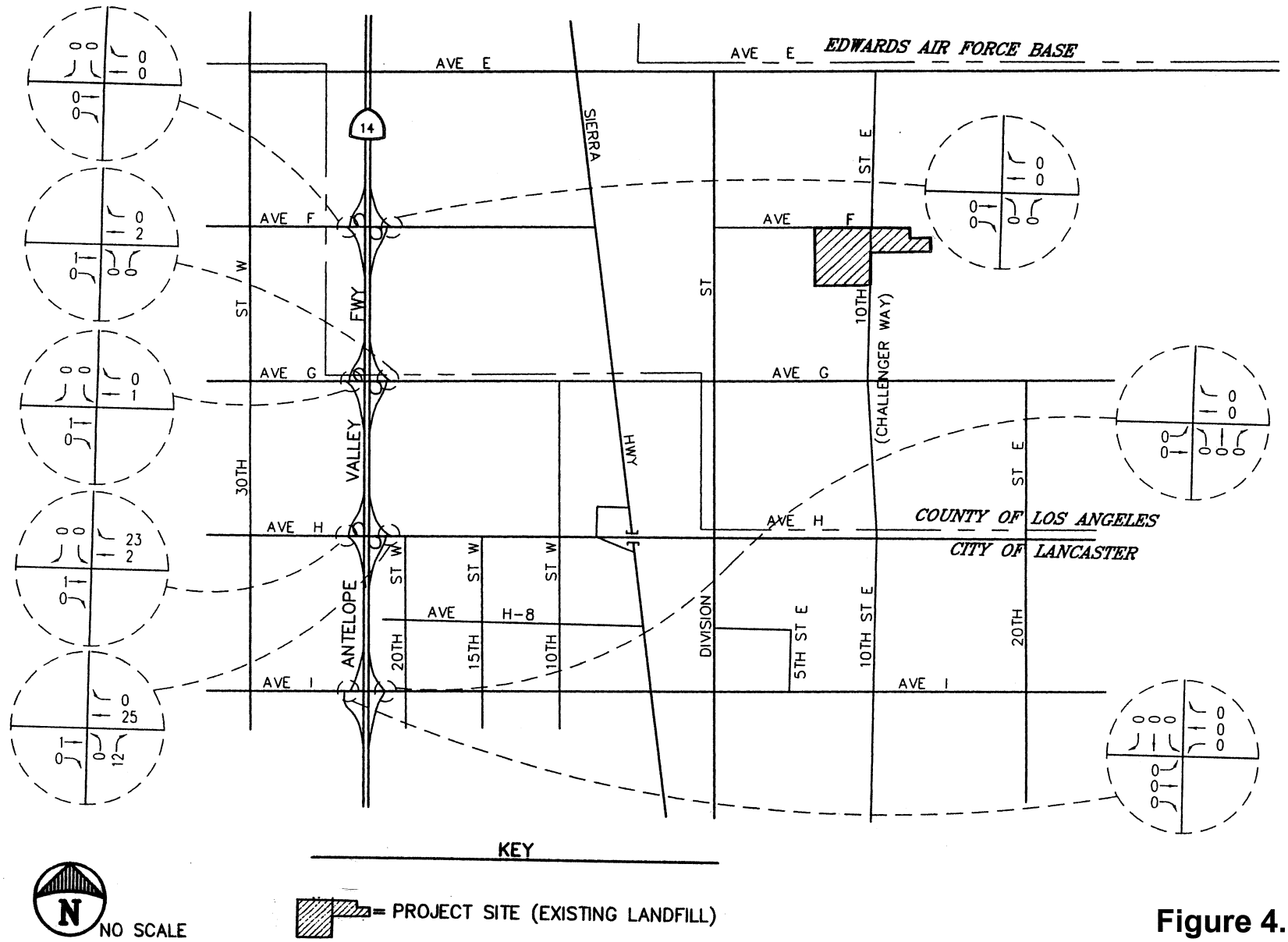


Figure 4.1-8
Project-Generated PM Peak Hour Traffic Volumes
(Without Avenue F Extension)

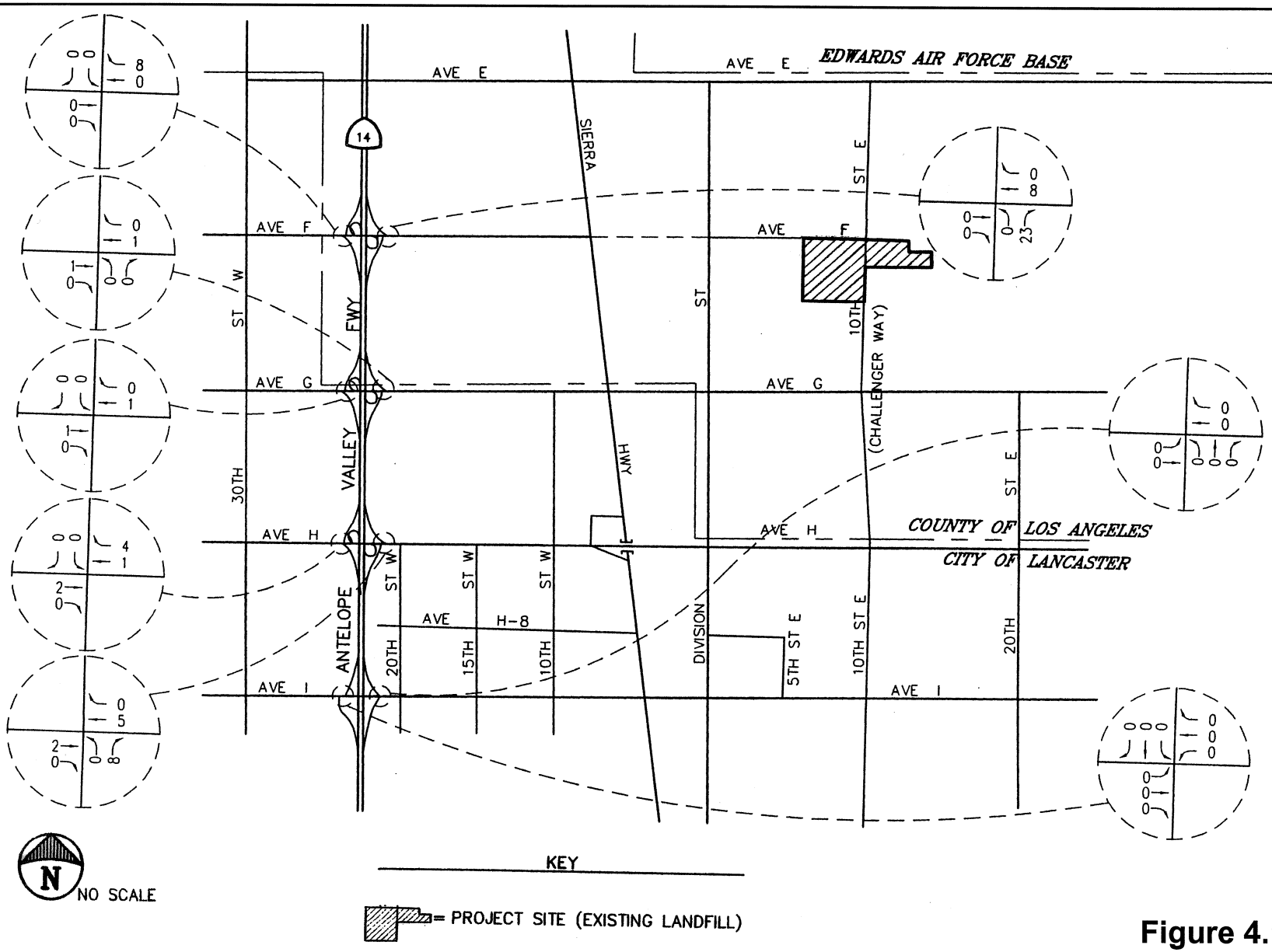


Figure 4.1-9
Project-Generated AM Peak Hour Traffic Volumes
(With Avenue F Extension)

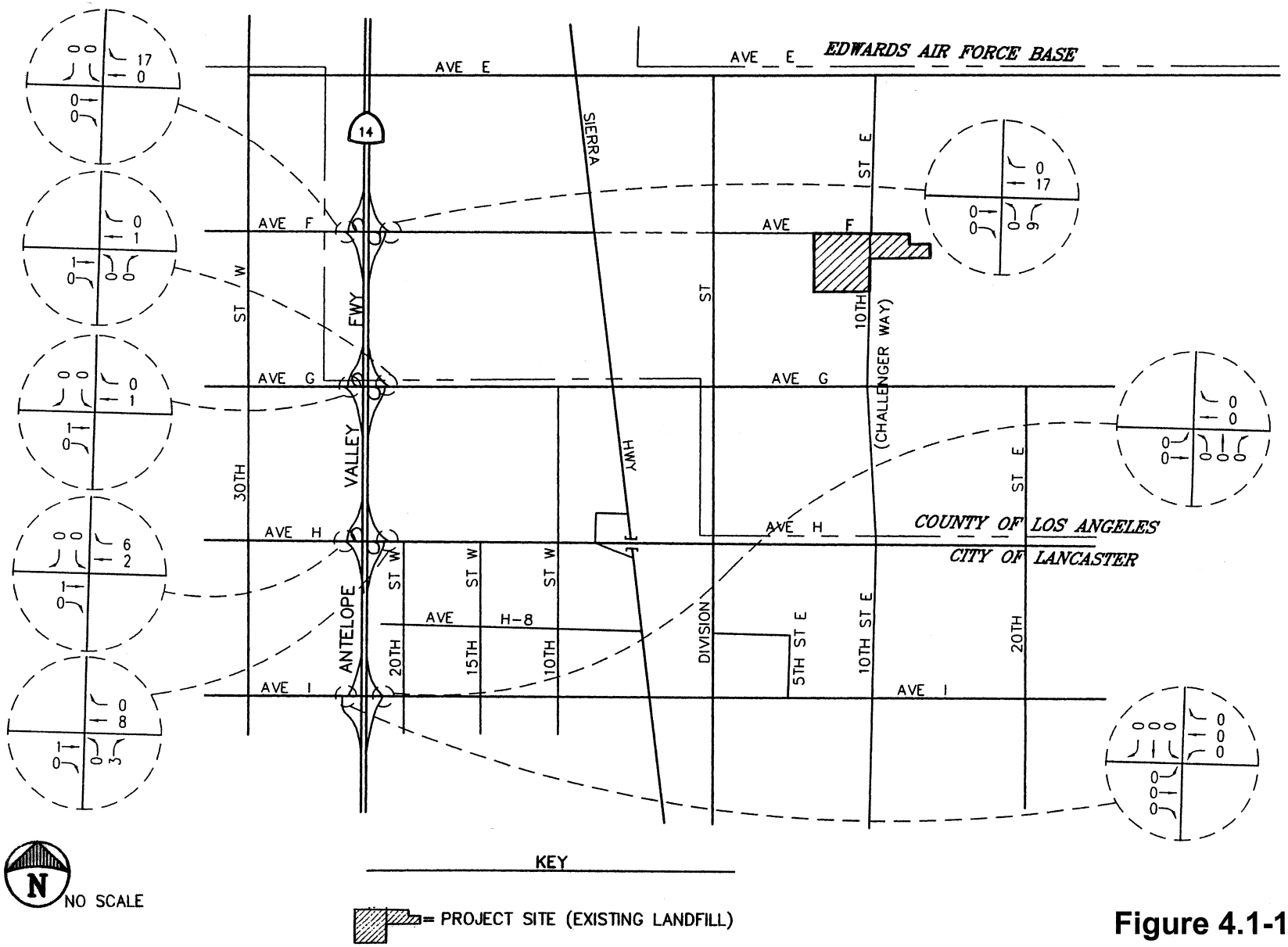


Figure 4.1-10
Project-Generated PM Peak Hour Traffic Volumes
(With Avenue F Extension)

Short-Term Construction Impacts

The proposed project proposes to increase the permitted daily refuse accepted at the Lancaster Landfill and Recycling Center from 1,700 tpd to 3,000 tpd (not including the related inflow previously identified). This administrative revision to the existing Solid Waste Facilities Permit does not include any traditional construction activities (i.e., those associated with the construction of structures, etc.) that would result in the generation of vehicular traffic. The potential impacts associated with these activities were previously evaluated in the 1997 EIR. Therefore, because no changes in these activities would occur as a result of project implementation, no additional vehicular trips would occur. As a result, no short-term, construction-related impacts will occur.

Long-Term Operational Impacts

Intersection Operating Conditions

Year 2006 Cumulative Base

The traffic impact analysis (refer to Appendix B) evaluated the potential project-related traffic impacts for "buildout" year, which is identified as 2006 because approval of the project would allow an immediate increase to 3,000 tpd (i.e., the maximum daily capacity, which would generate the most project-related traffic). Based on the County's guidelines, background traffic in the study area has been estimated to increase at a rate of 3.8 percent per year. Future increases in background traffic due to regional development are expected to continue at the same rate. Therefore, the Year 2006 cumulative base traffic volumes reflect a 3.8 percent increase in traffic on the circulation system.

The Year 2006 traffic forecasts include a 3.8 percent increase compared to Year 2005 traffic volumes. Typical ambient growth rates range between one and two percent. Further, most background growth is expected to occur along regional roadways, not the collector roadways evaluated in the traffic analysis. With the application of the 3.8 percent growth rate to all of the volumes in the study, all key intersections are projected to operate at LOS D or better without the project as indicated in Table 4.1-6.

Table 4.1-6

2006 Cumulative (without Project) Intersection Peak Hour LOS
Lancaster Landfill and Recycling Center

Key Intersection[1]	AM Peak Hour		PM Peak Hour		Acceptable
	ICU	LOS	ICU	LOS	LOS
Avenue F/SR-14 SB Ramps	0.14	A	0.20	A	Yes
Avenue F/SR-14 NB Ramps	0.13	A	0.20	A	Yes
Avenue G/SR-14 SB Ramps	0.18	A	0.20	A	Yes
Avenue G/SR-14 NB Ramps	0.19	A	0.20	A	Yes
Avenue H/SR-14 SB Ramps	0.23	A	0.31	A	Yes
Avenue H/SR-14 NB Ramps	0.22	A	0.27	A	Yes
Avenue I/SR-14 SB Ramps	0.54	A	0.59	A	Yes
Avenue I/SR-14 NB Ramps	0.56	A	0.89	D	Yes

[1]All analyzed intersections are currently stop-controlled, except for Avenue H/SR-14 NB Ramps, Avenue I/SR-14 NB Ramps, and Avenue I/SR-14 SB Ramps. Based upon LACDPW Traffic Division staff's direction, all key intersections were analyzed as if they were signalized.

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

Figures 4.1-11 and 4.1-12 reflect the Year 2006 cumulative base a.m. and p.m. peak hour traffic volumes (without the Avenue F Extension).

Year 2006 Cumulative Plus Project

Table 4.1-7 summarizes the project-related traffic impacts on the key study intersections. As can be seen in that information, all of the key intersections will continue to operate at an acceptable level of service (i.e., LOS D or better). The greatest ICU increase resulting from project implementation in the "with Avenue F Extension" is 0.01 in the a.m. peak hour at the Avenue F/SR-14 Northbound Ramps and Avenue H/SR-14 Northbound Ramps in the p.m. peak hour. Similarly, in the "without Avenue F Extension, only one intersection (Avenue H/SR-14 Northbound Ramps) would realize a 0.01 increase in the ICU during both the a.m. and p.m. peak hours. The increase in project-related traffic forecast for either roadway improvement scenario is less than significant because all of the key intersections will continue to operate at LOS A and the increase in the ICU is less than 0.04, as prescribed in the County of Los Angeles significance criteria identified in Section 4.1.2. As previously indicated, even with operational "peak" traffic associated with infrequent increases in the number of loads of contaminated soils and cover soils that are transported to the LLRC for disposal (refer to Table 4.1-4b), all of the key study intersections would be forecast to operate at an acceptable level of service.

These a.m. and p.m. peak hour volumes without the Avenue F Extension are illustrated on Figures 4.1-13 and 4.1-14. Only minor changes in the a.m. and p.m. volumes would occur in this cumulative base condition if the Avenue F Extension is implemented, as reflected on Figures 4.1-15 (a.m. peak hour volumes) and 4.1-16 (p.m. peak hour volumes).

Table 4.1-7

Year 2006 Cumulative Plus Project Intersection Peak Hour Levels of Service
Lancaster Landfill and Recycling Center

Key Intersection[1]	Peak Hour	Year 2006 Cumulative Base		Year 2006 Cumulative + Project (With Avenue F Extension)				Year 2006 Cumulative + Project (Without Avenue F Extension)			
		ICU	LOS	ICU	LOS	ICU Increase	Sig. Impact?	ICU	LOS	ICU Increase	Sig. Impact?
Avenue F @ SR-14	AM	0.14	A	0.14	A	0.00	No	0.14	A	0.00	No
SB Ramps	PM	0.20	A	0.21	A	0.01	No	0.20	A	0.00	No
Avenue F @ SR-14	AM	0.13	A	0.15	A	0.02	No	0.13	A	0.00	No
NB Ramps	PM	0.20	A	0.21	A	0.01	No	0.20	A	0.00	No
Avenue G @ SR-14	AM	0.18	A	0.18	A	0.00	No	0.18	A	0.00	No
SB Ramps	PM	0.20	A	0.20	A	0.00	No	0.20	A	0.00	No
Avenue G @ SR-14	AM	0.19	A	0.19	A	0.00	No	0.19	A	0.00	No
NB Ramps	PM	0.20	A	0.21	A	0.01	No	0.21	A	0;01	No
Avenue H @ SR-14	AM	0.23	A	0.23	A	0.00	No	0.23	A	0.00	No
SB Ramps	PM	0.31	A	0.31	A	0.00	No	0.31	A	0.00	No
Avenue H @ SR-14	AM	0.22	A	0.22	A	0.00	No	0.24	A	0.02	No
NB Ramps	PM	0.27	A	0.28	A	0.01	No	0.28	A	0.01	No
Avenue I @ SR-14	AM	0.54	A	0.54	A	0.00	No	0.54	A	0.00	No
SB Ramps	PM	0.59	A	0.59	A	0.00	No	0.59	A	0.00	No
Avenue I @ SR-14	AM	0.56	A	0.56	A	0.00	No	0.56	A	0.00	No
NB Ramps	PM	0.89	D	0.89	D	0.00	No	0.89	D	0.00	No

[1]All key intersections are currently unsignalized, except for Avenue H @ SR-14 NB Ramps, Avenue I @ SR-14 NB Ramps, and Avenue I @ SR-14 SB Ramps, which are signalized. Based upon LACDPW Traffic & Lighting Division staff's direction, all key intersections were analyzed as if they were signalized.

SOURCE: Linscott, Law & Greenspan (Revised October 2, 2006).

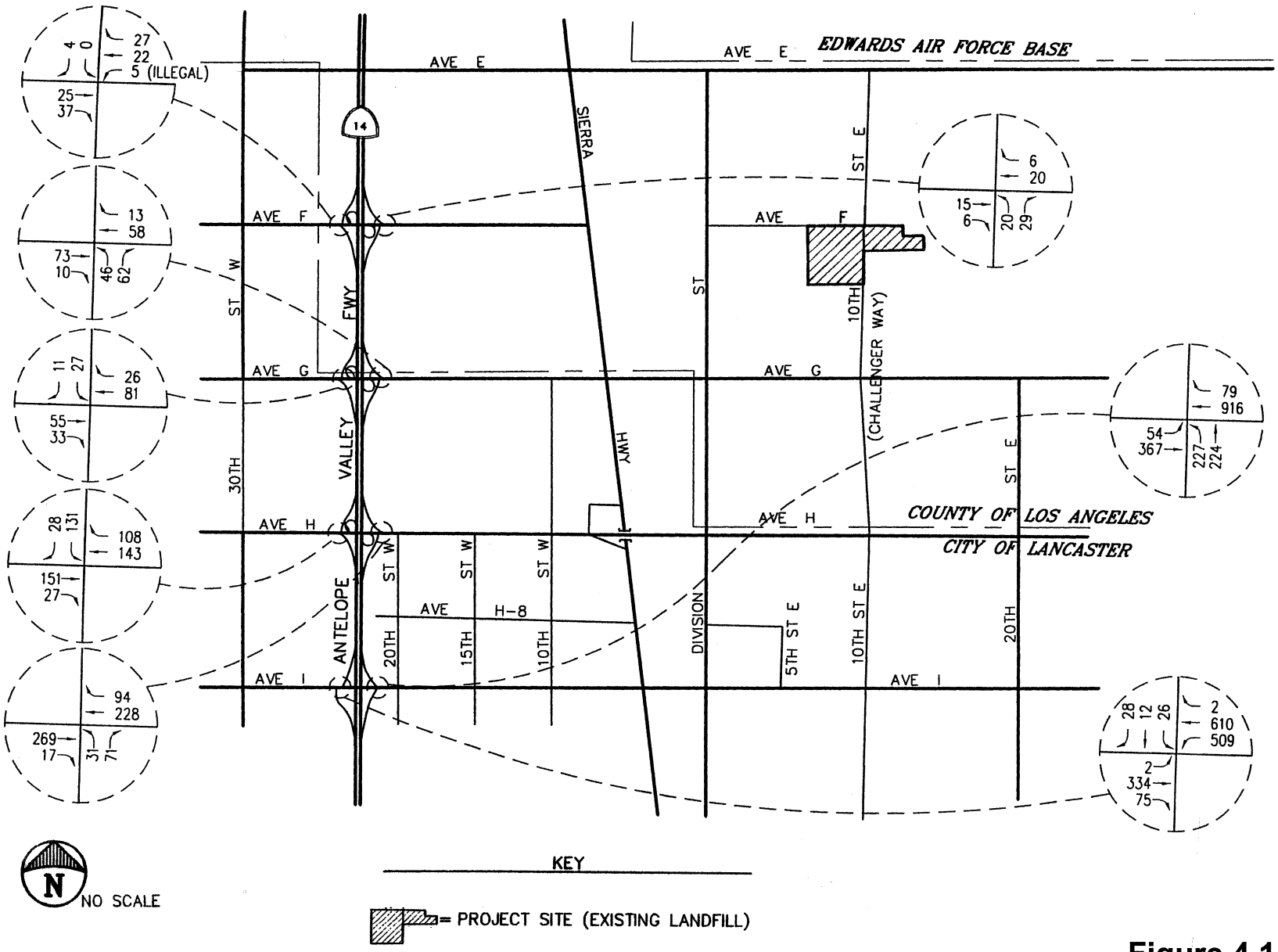


Figure 4.1-11
Year 2006 Cumulative Base AM Peak Hour Traffic Volumes

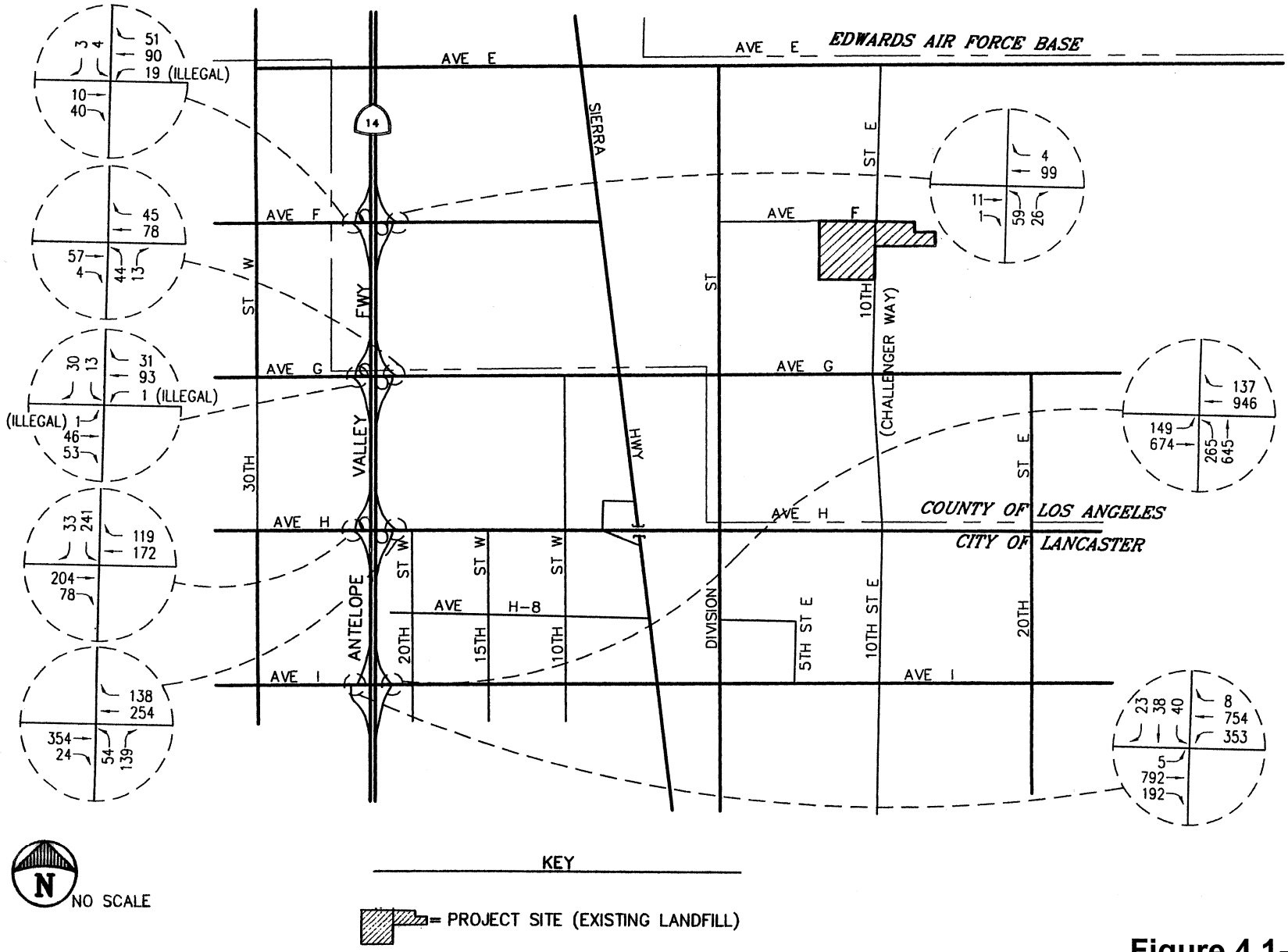


Figure 4.1-12
Year 2006 Cumulative Base PM Peak Hour Traffic Volumes

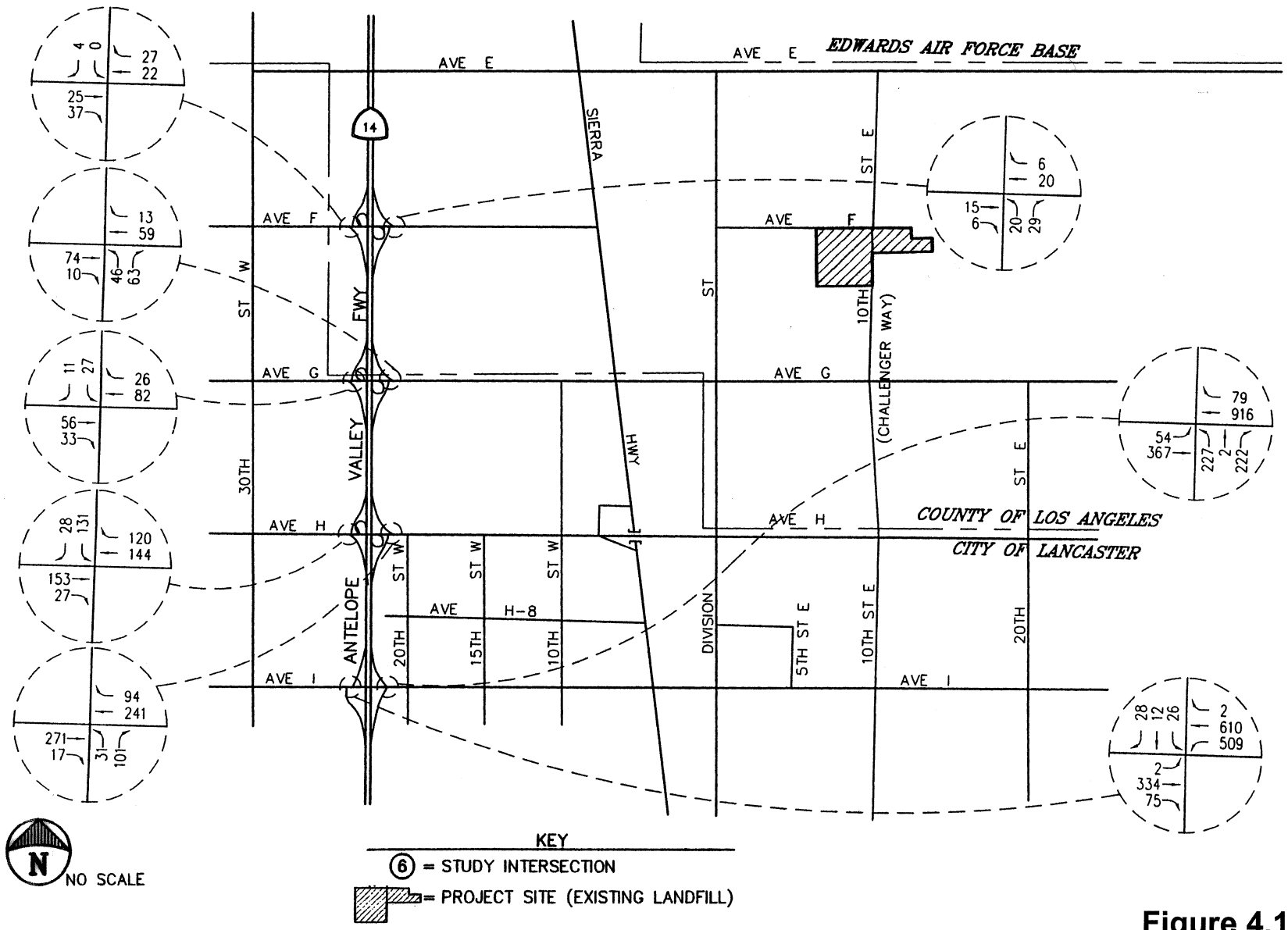


Figure 4.1-13
Year 2006 Cumulative Plus Project AM Peak Hour Traffic Volumes (Without Avenue F Extension)

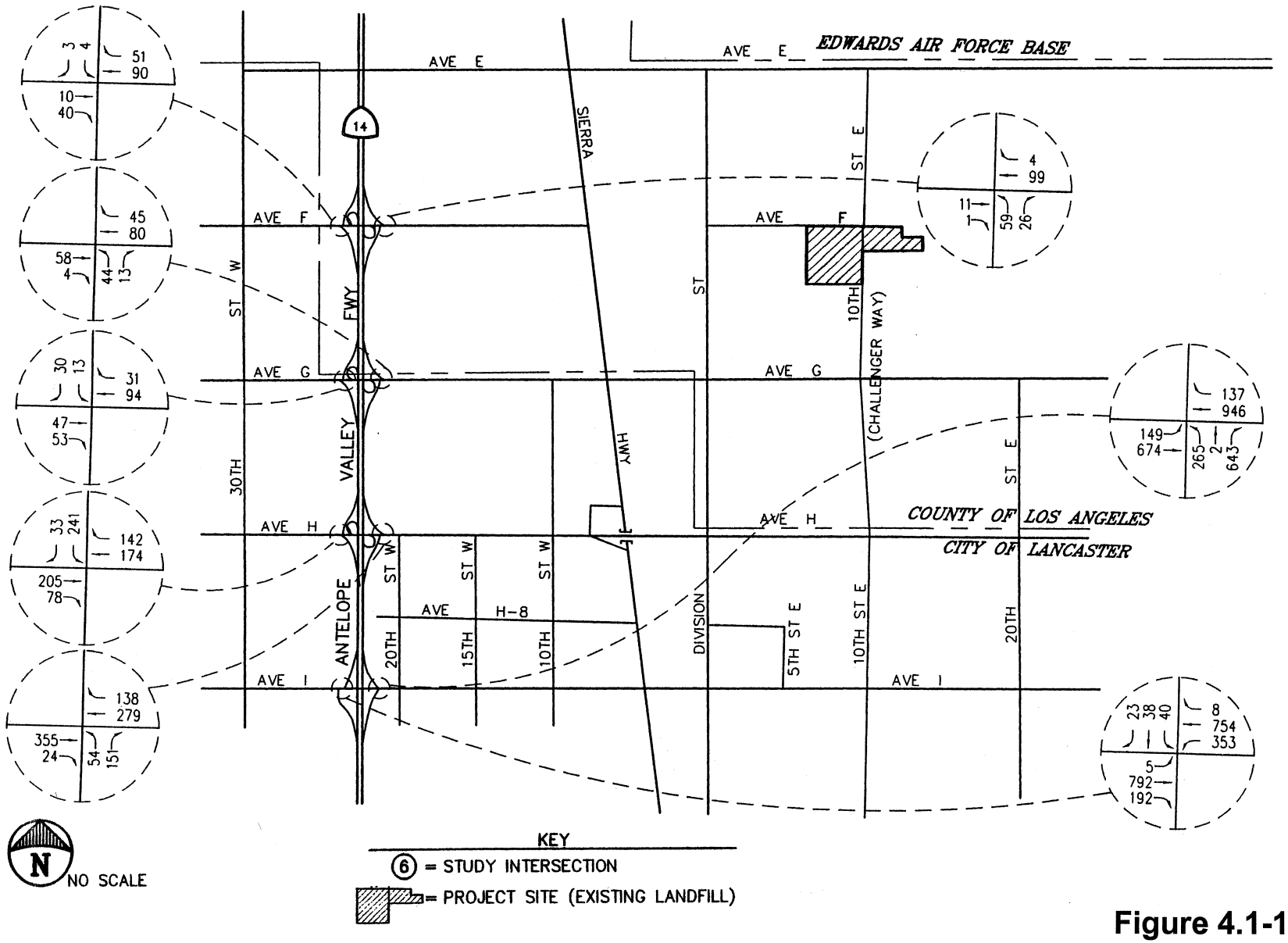


Figure 4.1-14
Year 2006 Cumulative Plus Project PM Peak Hour Traffic Volumes (Without Avenue F Extension)

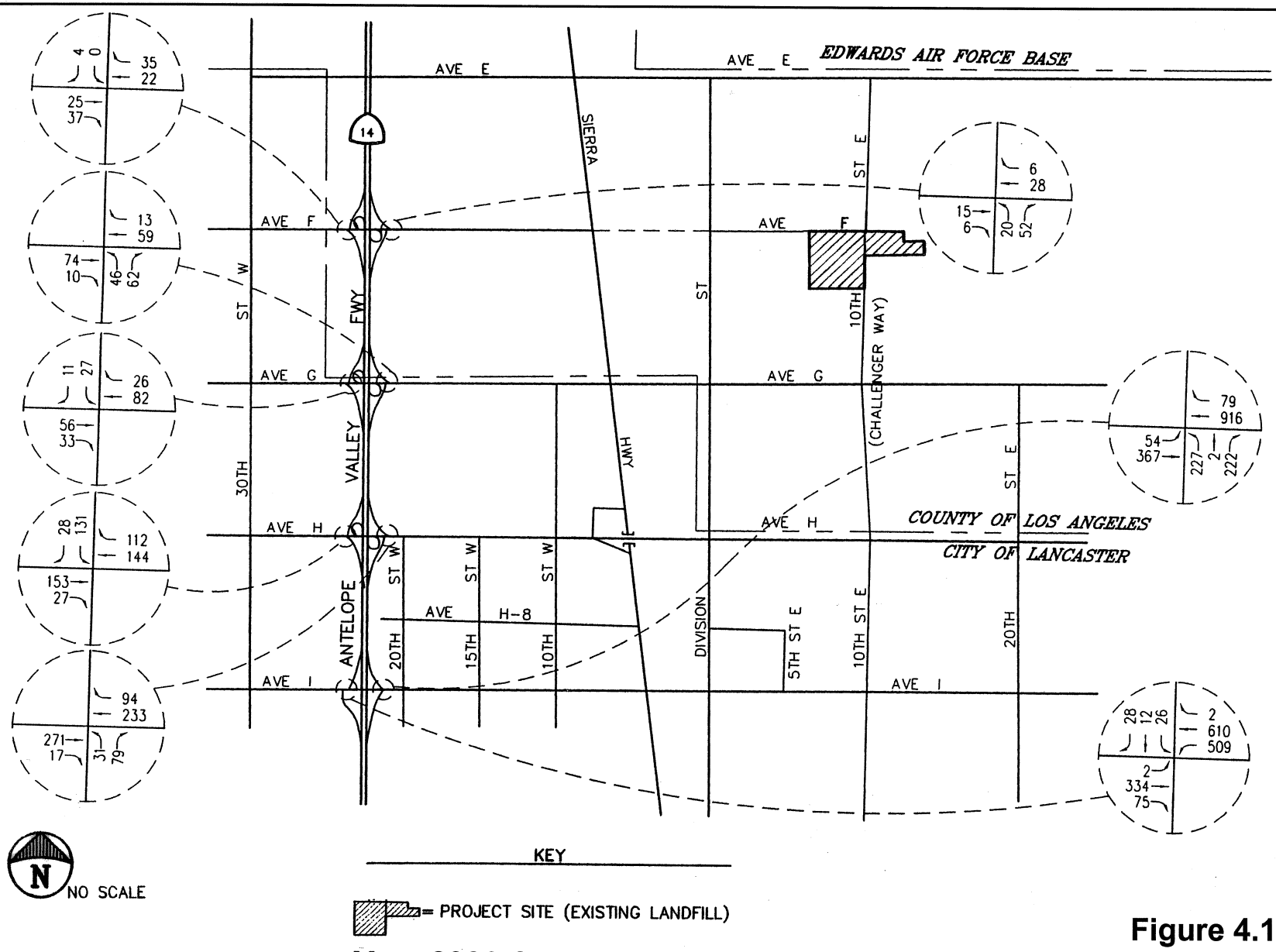


Figure 4.1-15

Year 2006 Cumulative Plus Project AM Peak Hour Traffic Volumes (With Avenue F Extension)

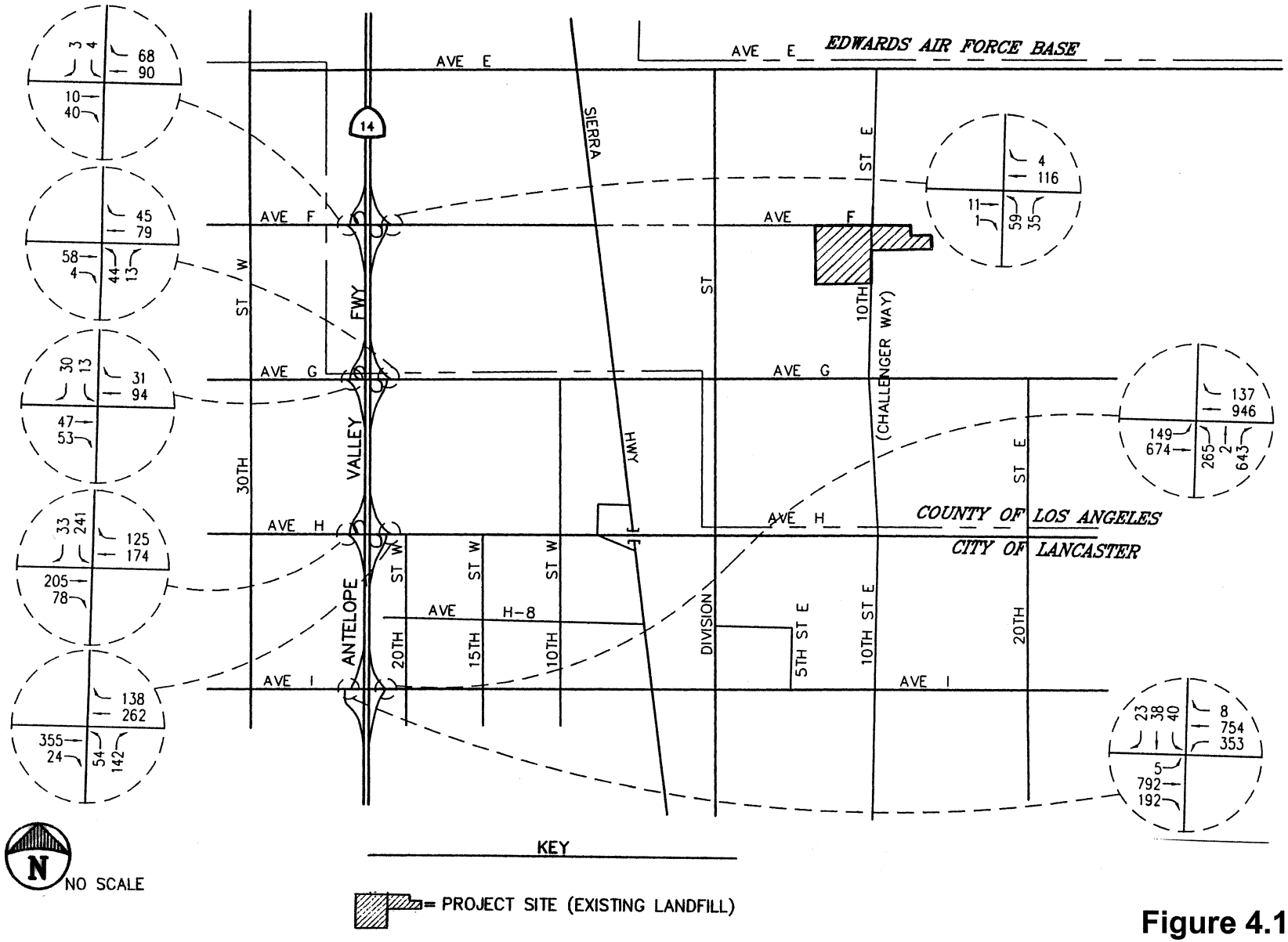


Figure 4.1-16
Year 2006 Cumulative Plus Project PM Peak Hour Traffic Volumes (With Avenue F Extension)

2006 Freeway Mainline Levels of Service

Year 2006 Cumulative Base

Table 4.1-8 reflects the results of the existing freeway mainline level of service analysis conducted for the proposed project. As indicated in the table, all of the freeway segments are forecast to operate acceptable levels of service (i.e., LOS D or better) in 2006 with background traffic growth (i.e., cumulative) without the proposed project, based on the assumed freeway capacity of 76,500 vehicles per day for a four-lane freeway segment.

Table 4.1-8

2006 Cumulative (without Project) Freeway Mainline Levels of Service
Lancaster Landfill and Recycling Center

SR-14 Freeway Segment	Existing Daily Volume	Volume/Capacity Ratio[1]	Level of Service
SR-14 Freeway North of Avenue F	38,031	0.50	A
SR-14 Freeway Between Avenue F and Avenue G	39,647	0.52	A
SR-14 Freeway Between Avenue G and Avenue H	40,724	0.53	A
SR-14 Freeway Between Avenue H and Avenue I	41,802	0.55	A
SR-14 Freeway South of Avenue I	52,444	0.68	B

[1]Freeway capacity of 76,500 vehicles per day (vpd) based on a 4-lane freeway segment was applied.

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

Year 2006 Cumulative Plus Project

As indicated in Table 4.1-9, project implementation will not result in any significant impacts on the five freeway mainline segments in the project environs. Traffic greatest increase in the volume/capacity ratio of the freeway segments would be 0.01 on the segment between Avenue G and Avenue H; however, the increase would not change the level of service of that segment. Table 4.1-9 indicates that all of the roadway segments will continue to operate at acceptable levels of service (i.e., LOS D or better).

Table 4.1-9

Year 2006 SR-14 Freeway Mainline Levels of Service
Lancaster Landfill and Recycling Center

SR-14 Freeway Segment	Project Daily Volumes	Cum. + Project Daily Volumes	V/C	LOS	Change In V/C	Sig. Project Impact?
SR-14 Freeway North of Avenue F	4	38,035	0.50	A	0.00	No
SR-14 Freeway Between Avenue F and Avenue G	273	39,920	0.52	A	0.00	No
SR-14 Freeway Between Avenue G and Avenue H	273	40,998	0.54	A	0.01	No
SR-14 Freeway Between Avenue H and Avenue I	273	42,075	0.55	A	0.00	No
SR-14 Freeway South of Avenue I	273	52,718	0.69	B	0.00	No

[1]Freeway capacity of 76,500 vehicles per day (vpd) based on a 4-lane freeway segment was applied.

SOURCE: Linscott, Law & Greenspan (Revised October 2, 2006)

Saturday Analysis

Existing disposal operations at LLRC include service to local residents that utilize the site primarily on Saturdays. Private automobile and pick-up customers paying for disposal have been the largest component of Saturday vehicle counts. Site records indicate a historic single Saturday high vehicle count of 900 vehicles, which occurred as a program called "Free Dump Days," which is schedule on two Saturdays a year. While the vehicles per day for the "Free Dump Days" event on a Saturday may exceed the recommended maximum daily vehicle limit of 419 vehicles, the peak hour traffic volume on the adjacent roadways on a typical Saturday are significantly less than the peak hour of a typical weekday, no additional traffic impacts will occur as a result of the Saturday LLRC activity. In addition, because the event only occurs twice a year, the traffic impact would not be considered to be a typical "worst case" condition.

4.1.3.2 Impacts Determined to be Significant

Short-Term Construction Impacts

As indicated in Section 4.1.4.1, the proposed project will not generate any construction traffic because no construction is proposed. Therefore, no significant short-term, construction-related impacts will occur as a result of project implementation.

Long-Term Operational Impacts

As previously indicated, a pavement analysis was also conducted along the four roadway segments adjoining the subject property. The existing pavement design of three of those segments (along Avenue F. Division Street, and 10th Street) currently exceeds the traffic index (TI). However, Table 4.1-10 indicates that the project is not expected to increase TI values from Year 2006 Cumulative Base conditions at all of the segments analyzed, with the exception of 10th Street between Avenue F and Avenue G under conditions with the project but without the Avenue F extension. Therefore, except for the 10th Street segment without the extension of Avenue F, the project would not cause any significant impacts on the pavement integrity of the four roadway segments.

The project-related increase in the TI value along 10th Street between Avenue F and Avenue G under conditions with the project, but without the Avenue F extension, constitutes a project significant impact. To mitigate this impact, the project will be required to contribute towards the reconstruction of the pavement and thickening of the base/sub-base on this one segment (if Avenue F is not extended).

4.1.4 Mitigation Measures

Impact 4.1-1 ***Project-generated truck traffic will impact the pavement integrity of Division Street between Avenue F and Avenue G (without the Avenue F extension).***

MM 4.1-1 Prior to an increase in operation, the applicant shall fully improve the pavement and thickening of the base/sub base on the following streets: (1) 10th Street East between Avenue F and Avenue G; (2) Avenue F between Division Street and 10th Street West; (3) Division Street between Avenue and F and Avenue G; (4) 10th Street West Between Avenue and F and Avenue G; and (5) Avenue G between 100 feet west of the southbound SR-14 on/off ramps and 10th Street East. If Avenue F between Sierra Highway and Division Street is constructed, the project shall also be responsible to improve Avenue F between 100 feet west of the southbound SR-14 on/off ramps and Sierra Highway.

MM 4.1-2 As part of the proposed Project, the LLRC intends to implement the following program to help maintain a clean road surface on the County roadway supporting ingress and egress for landfill traffic:

- Install "rumble grates" on the access road within the site property between the exit scale and driveway leading to East Avenue F (to remove loose material from vehicles prior to exiting the site).
- Wash down the pavement surface of the onsite exit road as well as East Avenue F, between Division St and Challenger Way, on a weekly basis.
- Conduct road sweeping twice per month on East Avenue F, between Division Street and Challenger Way.

In addition to these mitigation measures, the following mitigation measure prescribed in EIR SCH No. 1993101036, shall also be implemented by the project sponsor, if applicable as determined applicable by the County Department of Public Works.

- Contribute on a fair share pro-rata basis to the cost to reconstruct the pavement of Avenue F between Division Street and 10th Avenue East and 10th Street East between Avenue F and Avenue G.

Table 4.1-10

2006 Pavement Integrity Analysis
Lancaster Landfill and Recycling Center

Roadway Segment	10-Year Design (Traffic Index)[1]	Year 2006 Cumulative Base			Year 2006 Cumulative Plus Project (With Avenue F)				Year 2006 Cumulative Plus Project (Without Avenue F)			
		Daily No. Trucks	10-Year Total (ESAL)[2]	Traffic Index	Project Only	Daily No. Trucks	10-Year Total (ESAL)[2]	Traffic Index	Project Only	Daily No. Trucks	10-Year Total (ESAL)[2]	Traffic Index
Avenue F between Division Street and 10th Street East	8.0	511	940,240	9.0	151	662	1,218,080	9.0	104	615	1,131,600	9.0
Division Street between Avenue F and Avenue G	7.5	552	1,015,680	9.0	47	599	1,102,160	9.0	97	649	1,194,160	9.0
10th Street East between Avenue F and Avenue G	5.5	217	399,289	8.0	40	257	472,880	8.0	86	303	557,520	8.5
Avenue G between Division Street and 10th Street East	N/A	489	899,760	9.0	4	493	907,120	9.0	4	493	907,120	9.0

[1]Design Traffic Indices (TI) were provided by the County where available.
[2]As contained in the *Caltrans Highway Design Manual* (July 1995), the ESAL 10-year constant is 1,840 (3-axle trucks).

SOURCE: Linscott, Law & Greenspan, Engineers (Revised October 2, 2006).

4.1.5 Level of Significance After Mitigation

As indicated in the preceding analysis, no potentially significant impacts are anticipated at the key study intersections. Although three of four roadways segments will be adversely impacted as a result of the increase in potential heavy truck traffic, project-related impacts to the integrity of the roadway segments will be reduced to a less than significant level through the payment of fees that will be used to upgrade the roadways. No significant adverse impacts will remain after implementation of the mitigation measures.

4.2 AIR QUALITY

Summary of Air Quality Analysis for EIR SCH No. 1993101036

EIR No. 1993101036 evaluated the potential air quality impacts associated with the expansion of the LLRC. That analysis evaluated potential air emissions impacts associated with the use of on-site vehicles (i.e., future operations at the landfill), fugitive dust, landfill gas and gas migration, health risk, off-site vehicle use, and odors. Specifically, project implementation would result in increased emissions from the use of heavy duty vehicles, fugitive dust, landfill gas, and on-site and off-site related traffic. The EIR concluded that expansion of the landfill would increase the amount of emissions from off-site vehicles, fugitive dust and landfill gas. Emissions increases attributed to the project would not exceed significant thresholds established by the AQMD for the region for sulfur oxides, carbon monoxide, reactive organic gas or particulates. Further, odors and landfill gas will continue to be generated at the landfill. As a result, several mitigation measures were prescribed to reduce the potential emissions. These mitigation measures are still applicable to the proposed project and are included in Section 4.2.5.

However, based on that analysis, the EIR concluded that project-related emissions of nitrogen oxides (NOx) would exceed the AQMD significance threshold. Therefore, these emissions would be significant both on a individual and cumulative basis. While mitigation measures were prescribed to reduce pollutant emissions (refer to Section 4.2.5), NOx emissions could not be reduced to a less than significant level. As a result, the Los Angeles County Regional Planning Commission adopted a Statement of Overriding Considerations prior to approval of the landfill expansion.

Current Air Quality Analysis

An air quality analysis was prepared by Environmental Compliance Solutions (March 1, 2006) to evaluate the potential air quality impacts associated with the proposed operational changes resulting from the increase in daily tonnage accepted at the LLRC. The findings and recommendations presented in that analysis are summarized below and the analysis is included as Appendix C.

4.2.1 Existing Conditions

Climate and Meteorological Conditions

The climate of the Antelope Valley, technically called an interior valley sub climate of Southern California's Mediterranean-type climate, is characterized by hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and fog that form along the Southern California coastline rarely extend as far inland as Lancaster, and if they do, they usually burn off quickly after sunrise. The most important weather pattern is associated with the funneling of the daily onshore sea breeze through Soledad Canyon into the upper desert to the north of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This transport pattern creates both unhealthful air quality as well as destroying the scenic vistas of the mountains surrounding the Antelope Valley.

Winds blow primarily from south to north and from west to east in response to the regional pattern of airflow from the cool ocean to the heated interior. A large portion of the airflow across the Antelope Valley therefore has its origin in more developed areas of the Los Angeles Basin. Seventy percent of all airflow across Lancaster derives from a narrow sector from southwest through west-northwest. These winds are moderately strong during the daytime, averaging from 10 to 13 mph, but become light and variable at night. Daytime local ventilation is, therefore, very good, but there may be nocturnal stagnation near local emissions sources such as the major area highways during the calm wind periods. Air pollutant emissions, however, are generally sufficiently low such that even during limited local dispersion conditions, air quality near the project site remains quite healthful. The primary Antelope Valley air quality concern is that there is a general transport of air from the polluted Los Angeles Basin through the Santa

Clarita Valley, and then toward the normally cleaner upper desert, especially during the summer smog season. This meteorological pattern will, therefore, make it difficult for the area to achieve clean air until sources in the developed portions of the basin are better controlled and less pollution is carried downwind across communities within the Antelope Valley.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the types of population groups and the activities involved. CARB has identified the following people who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive population groups. Land uses that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. These land uses are called sensitive receptors. There are no sensitive receptors located within 2 miles of the Lancaster landfill.

National ambient air quality standards (NAAQS) were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. Because California had established state standards (CAAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is a considerable difference between state and national clean air standards. A comparison between the state and federal standards currently in effect in California are shown in Table 4.2-1.

Table 4.2-1

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 Hour	0.0.9 ppm (180 µg/m^3)	Ultraviolet Photometry	0.12 ppm (235 µg/m^3)	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	--		0.08 ppm (157 µg/m^3)		
PM_{10}	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Geometric Mean	20 µg/m^3		50 µg/m^3		
$PM_{2.5}$	24 Hour	No State Standard		65 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour Lake Tahoe	2 ppm (7 mg/m^3)		--	--	--
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	--	Gas Phase Chemilumines-cence	0.053 ppm (100 mg/m^3)	Same as Primary Standard	Gas Phase Chemilumines-cence
	1 Hour	0.25ppm (470 µg/m^3)		--		
Lead	30 Day Average	1.5 µg/m^3	Atomic Absorption	--	--	--
	Calendar Quarter	--		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_X)	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.30 ppm (80 µg/m^3)	--	Spectrophotometry (Pararosoaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	--	
	3 Hour	--		--	0.5 ppm (1300 µg/m^3)	
	1 hour	0.25 ppm (655 µg/m^3)		--	--	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape		No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

SOURCE: Giroux & Associates (September 2004)

Planning and enforcement of the new federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. The U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. These attainment planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA, in April 2004, downgraded the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard. Because the Mojave Desert Air Basin is far from attaining the 1-hour federal standard, the 8-hour ozone non-attainment designation will not substantially alter the attainment planning process.

Baseline Air Quality

Existing levels of ambient air quality and historical trends and projections in the project area are well documented from measurements made on behalf of the Antelope Valley Air Pollution Control District (AVAPCD). The Antelope Valley is in the Mojave Desert Air Basin (MDAB). Until 1997, the Los Angeles County portion of the Antelope Valley was under the regulatory authority of the South Coast Air Quality Management District (SCAQMD). With the creation of the AVAPCD, much of the technical support (monitoring, enforcement, etc.) was transferred to the Mojave Desert AQMD. In 2002, the AVAPCD became the Antelope Valley Air Quality Management District (AVAQMD). The Mojave Desert AQMD still retains its role of technical support.

The South Coast and/or Mojave Desert AQMDs have operated an air quality monitoring station in Lancaster for a number of years. This station is considered representative of most of the developed areas of the Antelope Valley. Measured air pollutants include ozone, carbon monoxide, nitrogen oxides, and respirable particulates. These measurements have shown that photochemical smog levels (mainly ozone) are high in summer, and that dust levels may exceed particulate standards throughout the year, but that primary vehicular pollutant levels such as carbon monoxide, nitrogen dioxide or lead are very low in the Antelope Valley area.

Table 4.2-2 summarizes the last seven years of published monitoring data for the Lancaster station from 1997-2003. While ozone levels continue to exceed the California and national hourly standards and the California 24-hour suspended particulate (PM-10) standard is often exceeded, all other pollutants, particularly those related to local source emissions, do not exceed their allowable levels. The data in Table 4.2-2 suggest that existing air quality problems present in the air basin are mainly due to the transport of pollutants from outside sources (see March 4, 2004 "Revised Draft AVAQMD 2004 Ozone Attainment Plan," p. 6.). Measurement data also suggest that the Antelope Valley can accommodate a reasonable level of growth without threatening the continued attainment of standards such as nitrogen oxides or carbon monoxide. Such growth may, however, exacerbate existing violations of standards for ozone and particulates. The draft ozone attainment plan states:

> "Local Antelope Valley emissions contribute to exceedances of both the NAAQS and CAAQS for ozone, but the Antelope Valley would be in attainment of both standards without the influence of this transported air pollution from upwind regions."

Meteorological variability produces a corresponding year-to-year change in ozone levels that somewhat obscures long-term trends. While 1999 was the "cleanest" ozone year, hourly maximum levels in 2002 to 2003 of 0.16 ppm were similar to those found 10 years ago. There were more violations of the state ozone standard in 2002 than any year since 1995. While there has been substantial air quality improvement within the last two decades, the Antelope Valley will apparently experience occasional unhealthful air quality well into the current decade.

Table 4.2-2

Antelope Valley Monitoring Summary
Lancaster Landfill and Recycling Center[1]

Pollutant/Standard	1997	1998	1999	2000	2001	2002	2003
Ozone							
1-Hour > 0.09 ppm	14	24	1	35	37	46	40
1-Hour > 0.12 ppm	0	8	0	2	3	5	4
8-Hour > 0.08 ppm	7	18	0	28	24	38	33
Max 1-Hour Conc. (ppm)	0.12	0.16	0.10	0.14	0.15	0.16	0.16
Carbon Monoxide							
1-Hour > 20.0 ppm	0	0	0	0	0	0	0
8-Hour > 9.0 ppm	0	0	0	0	0	0	0
Max 1-Hour Conc. (ppm)	6	5	7	6	6	--	--
Max 8-Hour Conc. (ppm)	4.0	3.6	5.4	4.3	3.3	2.2	1.9
Nitrogen Dioxide							
1-Hour > 0.25 ppm	0	0	0	0	0	0	0
Max 1-Hour Conc. (ppm)	0.07	0.08	0.08	0.06	0.08	0.10	0.07
Inhalable Particulates (PM-10)							
24-Hour > 50 $\mu g/m^3$	2/59	2/52	2/58	--	--	2/58	--
24-Hour > 150 $\mu g/m^3$	0/59	0/52	0/58	--	--	0/58	--
Max 24-Hour Conc. ($\mu g/m^3$)	54.0	80.0	85.0	--	--	73.0	--
Ultra-Fine Particulates (PM-2.5)							
24-Hour > 65 $\mu g/m^3$	--	--	0/113	0/113	0/116	0/107	--
Max 24-Hour Conc. ($\mu g/m^3$)	--	--	47.6	36.0	35.0	24.0	--

[1]Days per year exceeding standards and maximum concentrations.
-- = No data available or not yet reported

SOURCE: California ARB (2000); Voyager CD, PTSD-00-015; Lancaster Monitoring Station and arb.ca.gov/adam/cgi-bin/adamtop4b.

Air Quality Planning

The Federal Clean Air Act and the California Clean Air Act have established timeframes for air quality improvement in "non-attainment" areas such as the Antelope Valley. The U.S. EPA designated the Southeast Desert Modified Air Quality Management Area (AQMA) as non-attainment for ozone NAAQS pursuant to the provisions of the Federal CAA. The Antelope Valley is included in the Southeast Desert Modified AQMA. The California Air Resources Board has also designated the Antelope Valley non-attainment for ozone CAAQS, pursuant to the provisions of the California CAA. The SCAQMD adopted attainment plans for the Antelope Valley when the region was under its jurisdiction. The most recent plan approved by the EPA was in 1994.

The AVAQMD now has jurisdiction over the Antelope Valley. The AVAQMD has reviewed and updated all elements of the ozone plan. The Antelope Valley will be in attainment of the NAAQS for ozone by the required year, 2007. The Antelope Valley will also show significant progress towards attainment of the CAAQS for the ozone standard by that year.

A draft plan has been developed that includes the latest planning assumptions regarding population, vehicle activity and industrial activity. That proposed plan addresses all existing and forecast ozone precursor-producing activities within the Antelope Valley through the year 2007. The plan includes all necessary information to allow general and transportation conformity findings to be made within the Antelope Valley.

The planning process does make some allowances when an airshed such as the Los Angeles County portion of the Mojave Desert Air Basin is downwind of an extreme non-attainment airshed such as the South Coast Air Basin (SCAB). Air pollution control measures embodied in clean air plans for the SCAB therefore are not equally effective in the downwind receptor airshed such as the Antelope Valley. However, it was believed that if air pollution control were excessively relaxed within the Mojave Desert since its air quality fate was controlled by the SCAB, the Antelope Valley would become a haven for polluters seeking to escape the more restrictive SCAB. Required air quality controls are, therefore, almost identical in Lancaster as in Los Angeles.

The rules and regulations of the AVAQMD are a part of the currently adopted and proposed updated clean air plan. Compliance with such rules ensures that the landfill operation conforms to the air plan. The facility must comply with AVAQMD Rule 1150.1 governing control of gaseous emissions from landfills, and with Rule 402, which prohibits creating a nuisance from odor or dust. On-site emissions sources are consistent with all emissions control requirements.

4.2.2 Significance Criteria

Air quality impacts are considered "significant" if they cause clean air standards to be violated where they are currently met, or if they measurably contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact. Appendix G of the California CEQA Guidelines offers the following five thresholds of significance. A project would have a potentially significant impact if it:

- Conflicts with or obstructs implementation of the applicable air quality plan.
- Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- Results 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).
- Exposes sensitive receptors to substantial pollutant concentrations.
- Creates objectionable odors affecting a substantial number of people.

Air quality impacts resulting from a project are significant if they cause clean air standards to be exceeded, or if they substantially worsen an existing violation.

Because many impacts cannot be evaluated relative to ambient clean air standards, many air quality jurisdictions have developed additional thresholds of potential impact significance. Most commonly, the volume of material emitted is used as a significance criterion even though there is no effective mechanism to convert these emissions into ambient air quality levels. The AVAQMD relies on guidance from the Mojave Desert AQMD in the use of significance thresholds for CEQA Analysis. The Mojave Desert AQMD thresholds are reflected in Table 4.2-3.

Table 4.2-3

Mojave Desert AQMD Operational Emissions Thresholds
Lancaster Landfill and Recycling Center

Criteria Pollutant	Emission Threshold (pounds/day)
Carbon Monoxide (CO)	548
Nitrogen Oxides (NOx)	137
Reactive Organic Gases (ROG)	137
Particulate Matter (PM-10)	82
SOURCE: Mojave Desert AQMD	

4.2.3 Potential Impacts

Potential project-related impacts anticipated to occur as a result of the proposed increase in daily capacity at the LLRC will derive primarily from mobile source emissions and the accelerated rate of generation of landfill gas. Emissions resulting from the proposed project can be categorized as follows:

- On-Site sources
  - Landfill gas surface emissions
  - Additional pieces of heavy duty equipment used for landfill operations
  - Fugitive dust emissions from additional wood/green waste grinding
- Off-site Sources
  - Off-site mobile emissions due to waste transport trucks
  - Off-site mobile emissions due to increased employee trips

4.2.3.1 Short-Term Air Quality Impacts

Short-term impacts typically occur during grading and construction activities associated with traditional development. Because the proposed project will not have a "construction" phase (i.e., grading and construction of physical structures/buildings, etc.), no short-term air quality impacts would occur as a result of project implementation. All of the project-related impacts (i.e., construction of the refuse cells, mobile-source emissions, etc.) will be operational (i.e., long-term) in nature and are discussed and evaluated in Section 4.2.3.2.

4.2.3.2 Long-Term Air Quality Impacts

Mobile-Source Emissions

Mobile-source emissions associated with the project implementation were calculated using the California Air Resources Board (ARB) EMFAC2002 version 2.2. Operational exhaust emissions for the LLRC project will result from on- and off-site heavy duty equipment, truck hauling operations, and employee commuting. Because these activities currently exist at the LLRC, it is the additional equipment, truck operations and new employee trips generated that have been analyzed to determine what operational air quality impacts are associated with the proposed increase in refuse tonnage at the LLRC.

The equipment fleet and personnel information presented in Table 4.2-4 is representative of existing and anticipated operations at the LLRC.

Table 4.2-4

Existing and Future Equipment and Personnel
Lancaster Landfill and Recycling Center

Equipment		Personnel	
Existing (1,700 tons/day)	**Future (3,000 tons/day)**	**Existing (1,700 tons/day)**	**Future (3,000 tons/day)**
2 Dozers + Spare	2 Dozers + Spare	3 Operators	5 Operators
1 Compactor + Spare	2 Compactors + Spare	1 Mechanic	1 Mechanic
2 Scrapers	2 Scrapers	4 Laborers	5 Laborers
2 Loaders	2 Loaders	2 Scale House	2 Scale House
1 Grader	1 Grader	1 Site Manager	1 Site Manager
2 Water Trucks	2 Water Trucks		1 Mechanic/Fueler
1 Grinder[1]	1 Grinder[2]	N/A	N/A
Existing Daily Truck Haul Trips (1,700 tons/day)		**Future Daily Truck Haul Trips (3,000 tons/day)**	
322		419 (+97)	

[1]Existing grinder is currently brought in from off-site to use when sufficient material exists on-site.
[2]Full-time on-site grinder will replace existing grinder currently used on a part time basis (no additional personnel are required to operate the grinder).

SOURCE: Bryan A. Stirrat & Associates (equipment fleet and personnel)
Linscott, Law & Greenspan, Engineers (existing and future daily truck trips); Traffic Study dated October 31, 2005)

Project-related emissions resulting from the increase in daily tonnage accepted at the LLRC are presented in Table 4.2-5. The size of the working face is approximately 150 x 150 feet at the present time. Based on the proposed inflow rate, the working face may increase to 200 x 150 feet, depending on site conditions. The unloading area will generally be maintained so that wastes can be immediately spread and compacted in order to reduce windblown litter, potential soil erosion, and potential dust impacts. The potential increase in particulate emissions associated with landfill operations will be minimized through dust suppression, as prescribed by the AQMD.

Table 4.2-5

Project-Related Emissions (lbs/day)
Lancaster Landfill and Recycling Center

Scenario	ROG	NOx	CO	PM-10
Existing Equipment[1]	25.0	208.8	175.6	10.2
Existing On-Road[1]	9.2	55.5	141.4	9.0
Total Existing[1]	**34.2**	**264.3**	**317.0**	**19.2[5]**
Future On-site Equipment[2]	3.0	45.0	12.0	3.0
Haul Trucks[2]	12.0	243.0	51.0	6.0
Future Commute Vehicles[2]	1.0	2.0	19.0	0.0
Future Fugitive Dust[3]	--	--	--	117.0
Future Project Increase[2]	**16.0**	**290**	**101**	**126**
Significance Threshold[4]	137	137	548	82
Threshold Exceeded?	No	**Yes**	No	**Yes**

[1]Hans Giroux (October 2004)
[2]Environmental Compliance Solutions, Inc. (March 2006)
[3]Fugitive dust includes: grinding of green waste, compactor usage, and tire/brake wear
[4]Mojave Desert AQMD (LLCR is located within the AVAQMD)
5PM-10 includes vehicle exhaust, tire wear, and fugitive dust.

SOURCE: Technical Appendix C

All of the analyzed project-related mobile equipment exhaust pollutant emissions are below significance thresholds, except for NOx and PM10. For example, the future project increase for both ROG and CO are less than 20 percent of the CEQA standard. CO emissions are lower in the future scenario because the transfer trucks have lower CO emissions per mile of travel than the current "packer" collection trucks that they will partially replace with a changing fleet mix. Dust emissions derive from vehicle and equipment travel on paved industrial roads and on unpaved surfaces, and from dumping of materials. The consolidation of smaller loads into larger transfer trailers will create only a small increase in daily haul trips (97 trips per day), and only one additional piece of heavy equipment will operate on the landfill. On-site operational activity emissions (i.e., dust and equipment exhaust) will not be substantially greater when compared to existing conditions (i.e., 1,700 tpd operations).

Landfill Emissions

Landfill gas (LFG) consists primarily of methane. The gas is produced by the anaerobic (i.e., without oxygen) decay of organic matter. The rate of LFG production depends upon the quantity and quality of the organic fraction of the waste stream, its biodegradability, the moisture content within the refuse mass, and age of waste. Regardless of the rate of decay, the same total amount of gas should be produced. Operation of the landfill at an increased daily rate of refuse receipt will increase subsurface LFG production but not increase the amount generated over the life of the landfill because the maximum landfill capacity will not change.

The amount of landfill gas generated in a municipal solid waste landfill is calculated using an anaerobic gas generation model. The model estimates the volume of gas generated in standard cubic feet per minute (scfm) as a function of the average waste composition, size of the landfill, age of waste, and rate of decomposition.

Operation of the landfill at an increased daily rate of refuse will increase the landfill gas production. The difference between the maximum generation rate (of landfill gas) and the maximum collection rate represents potential fugitive emissions.

The LLRC currently has an LFG collection system as required by federal and state regulations. The system consists of a series of horizontal and vertical wells, connection piping, headers, and blowers for the withdrawal of the gases from the landfill. The pipe network is connected to an enclosed flare for destruction of the landfill gas. Flares are considered by the air districts to be Best Available Control Technology (BACT).

The enclosed flare is permitted by the Antelope Valley Air Quality Management District for a maximum landfill gas flow of 1,388 scfm. Oxides of nitrogen (NOx), SOx, CO, and PM10 are products of the combustion process and have permitted limits. Although the gas generation rate will increase slightly due to the projected increase in daily tonnage, the flow of LFG will not exceed currently permitted flare limits.

It is important to note that although the project-related emissions associated with additional green waste handling as well as mobile-source emissions attributable to the increased landfill truck traffic are less than significant because the emissions are below the significance thresholds prescribed by the AVAQMD, these emissions, when considered with the previously approved projects and those that have been proposed (refer to Chapter 9.0, Cumulative Impacts) will incrementally contribute to the basin-wide emissions. Because the air basin is currently designated as a non-attainment area for ozone and particulates, any incremental increase is considered to be potentially significant.

Toxic Air Contaminants (TACs) From Landfill

Landfill gas consists primarily of methane. While most of the gas is eliminated via the landfill flare, some gas can escape via the surface of the landfill. Methane can be flammable at certain exposure levels. Facility personnel conduct methane sampling on a monthly basis to ensure that methane is not emitted beyond the property line of the landfill. A trace amount of the landfill gas contains toxic constituents. As such, a small amount of toxic air contaminants (TACs) can also escape through the surface of the landfill.

A screening level health risk assessment was conducted for the small fraction of toxic air contaminants that may escape within the fugitive portion of LFG. The risk assessment is based upon TACs measured in landfill gas sampled at the inlet of the flare. This analysis is based upon a "worst case" scenario of maximum gas generation rate and ten percent fugitive gas emissions rate.

A Rule 1401 Tier 2 evaluation, which combines information on the emission rate, toxicity, meteorological variation, lifetime exposure, and possible multi-pathway impacts as well as atmospheric dispersion, was conducted. The results of the Tier 2 analysis are presented in Table 4.2-6.

Table 4.2-6

Tier 2 TAC Analysis
Lancaster Landfill and Recycling Center

Toxic Air Contaminant	Risk Factor	Risk[1]
Benzene	29×10^{-6}	0.086×10^{-6}
Dichlorobenzene	11×10^{-6}	0.035×10^{-6}
1,1-dichlorethane	1.6×10^{-6}	0.006×10^{-6}
1,2-dichlorethane	21×10^{-6}	0.007×10^{-6}
Dichloromethane	1×10^{-6}	0.007×10^{-6}
Perchloroethylene	5.9×10^{-6}	0.220×10^{-6}
Trichloroethylene	2×10^{-6}	0.059×10^{-6}
Vinyl Chloride	78×10^{-6}	0.102×10^{-6}
	Total	**0.522×10^{-6}**

[1]Risk is based on the assumption that the existing TAC emissions will continue at the present rate for 70 years.

SOURCE: Environmental Compliance Solutions (March 2006)

As indicated in Table 4.2-6, the risk is based upon an assumption that the existing rate of TAC emissions will continue at the present rate for 70 years. However, although near-term LFG production will increase, production of LFG will taper off gradually after the landfill closes. The AVAQMD considers a risk of less than one in one million (i.e., 1.0×10^{-6}) to be insignificant. Risks up to 10 in one million (i.e., 10×10^{-6}) are considered a manageable level of risk, if toxics best available control technology (T-BACT) for toxics is used. LFG recovery and waste gas flaring is considered T-BACT. The Tier 2 screening risk concluded that there is no significant public health risk from TAC emissions.

TACs from Grinder

The wood waste grinder requires a diesel-powered internal combustion engine. Diesel emissions contain toxic by-products. The maximum predicted cancer risk to an individual at 500 meters downwind of this grinder is 1.1 in one million (1.1×10^{-6}). Under AVAQMD Rule 1401, permitting of a new emission source requires Best Available Control Technology for Toxics (T-BACT) if predicted cancer risk exceeds 1 in one million, and a permit application is denied if predicted cancer risk exceeds 10 in one million. Control is required for existing sources under Rule 1402 if predicted cancer risk exceeds 25 in one million. Since modeling results indicate a maximum impact of 1.1 in one million, T-BACT would be required for the grinder.

The SCAQMD threshold for chronic and acute hazard indices is 1.0. At 500 meters from the grinder, the maximum acute hazard index is predicted to be 0.12, and the maximum chronic hazard index is predicted to be 0.0061. Both the acute and chronic hazard indices are below the SCAQMD threshold. Table 4.2-7 reflects the potential carcinogenic health risk associated with the new grinder.

Table 4.2-7

TAC Analysis (Grinder)
Lancaster Landfill and Recycling Center

Toxic Air Contaminant	Risk Factor	Risk[1]
Acetaldehyde	2.70×10^{-6}	4.07×10^{-9}
Arsenic	3.3×10^{-3}	2.74×10^{-8}
Benzene	2.9×10^{-5}	1.04×10^{-8}
1,3 Butadiene	1.70×10^{-4}	7.10×10^{-8}
Cadmium	4.2×10^{-3}	1.21×10^{-8}
Chromium (iv)	1.5×10^{-1}	2.91×10^{-8}
Formaldehyde	6.0×10^{-6}	1.99×10^{-8}
Lead	1.20×10^{-5}	1.91×10^{-10}
Nickel	2.6×10^{-4}	1.9×10^{-9}
PAHs	1.1×10^{-3}	9.72×10^{-7}
	Total	**1.1×10^{-6}**

[1]Risk is based on the assumption that potential TAC emissions from this grinder will continue at the present rate for 70 years.

SOURCE: Environmental Compliance Solutions (March 2006)

Odors

Landfills emit odor from freshly delivered municipal solid waste (MSW) when the truck is emptied at the landfill "working face." The "fresh trash" odor is the odor that might be noticed in the curbside collection container on pick-up day after the material has begun initial decomposition. Odor strength of fresh trash depends upon the amount of readily degradable material, the moisture level, and the storage temperature. For residentially-dominated MSW, with generally good daytime mixing, the fresh trash odor is noticeable for approximately one-fourth mile downwind (normally east of the landfill). There are minimal sensitive uses within the zone of daytime odor detectability.

With a properly operating LFG collection system, the zone of LFG detectability under stable nocturnal meteorological conditions can be reduced from 1-2 miles with no system to around one-half mile with the system. The system of wells and the flare at the existing landfill maintain a zone of odor detectability that rarely, if ever, reaches the closest houses. As long as additional LFG collection and disposal capacity is developed as required by the California Code of Regulations and in conjunction with an increased disposal rate of up to 3,000 tons per day, as required by the California Code of Regulations, setbacks from the nearest homes will be adequate to preclude creation of any adverse odor impact from "fugitive" landfill gas. No modifications to the gas collection and monitoring system are proposed. Odors from the LLRC will continue to be regulated by federal, State and local regulations (e.g., AVAQMD Rules 401 and 402) to ensure that odors do not emanate from the landfill. Any complaints related to odors emanating from the landfill would be received at the LLRC; however, to date, no complaints have been received.

4.2.4 Mitigation Measures

Implementation of the LLRC project will not require any physical changes to the existing landfill or on-site structures. There are no construction activities associated with the proposed project. The operational activities would add one additional on-site piece of mobile equipment, one full-time grinder, 97 additional haul truck trips, and up to 20 new employee trips. These increases will exceed the NOx and PM10 significance thresholds (refer to Table 4.2-5).

Impact 4.2-1 ***Project implementation will result in NOx and PM10 emissions associated with on-site equipment, haul trucks, and commuter vehicles that exceed the significance thresholds for those pollutants.***

Impact 4.2-2 ***Although the other project-related emissions will be less than significant, the incremental contribution of daily emissions in the air basin, when combined with stationary and mobile-source emissions resulting from other approved and proposed projects in the air basin (refer to Cumulative Impacts, Chapter 9.0), which has been designated non-attainment for ozone and PM10, will exacerbate the existing unacceptable air quality in the air basin.***

No feasible mitigation measures are available to reduce the potentially significant NOx and PM10 emissions resulting from project implementation. As a result, these potential impacts will remain significant and unavoidable. Nonetheless, the mitigation measures prescribed in EIR SCH No. 1993101036 are still required and will continue to be implemented. These measures are identified below.

- Conduct engine feasibility study to determine whether equipment and vehicles can be powered with engines that meet on-highway standards. Evaluation to include utilization of turbocharged and intercooled diesel engines, and retardation of fuel injection.
- Tune-up and maintain landfill equipment in accordance with manufacturers schedules and specifications.
- Instruct operators and supervisors to report any symptoms of performance which require maintenance.
- Instruct equipment operators to shut down diesel equipment if it is expected to idle for more than 10 minutes.
- Evaluate feasibility of employee ridesharing program.
- Continue existing dust suppression measures on unpaved roads, in borrow areas, and at working face of landfill.
- Continue to operate landfill gas collection and combustion system in accordance with governing APCD regulations.
- Continue to monitor surface emissions and gas migration as required by the APCD, the LA County Department of Public Works (LACDPW) in LA County Building Code, Section 110.3 and the LEA in CCR, Title 27, as applicable.
- Install landfill gas migration monitoring probes around the perimeter of the expansion areas.
- Conduct regular visual inspections of landfill cover and monitor gas emissions in accordance with governing APCD and CCR, Title 27 regulations.
- Apply daily cover at working face of the landfill.
- In the event that an odor complaint is verified by LEA to be related to the disposal of sludge, LEA may order movement or suspension of sludge disposal operations.

4.2.5 Level of Significance After Mitigation

As indicated above, NOx and PM10 impacts would remain significant after mitigation. Because the incremental increase in emissions will contribute to the existing non-attainment status of the air basin and, further, because no feasible mitigation measures are available to offset the incremental increase, the cumulative impacts will remain significant (refer to Chapter 9.0, Cumulative Impacts).

4.3 NOISE

Summary of Noise Analysis for EIR SCH No. 1993101036

The noise analysis conducted for EIR SCH No. 1993101036 concluded that short-term impacts on ambient noise levels would occur as a result of construction activities at the LLRC as well as additional traffic that would result from the expansion; however, the noise increases due solely to the expansion (i.e., landfill activities) were not considered to be significant because they did not exceed the significance thresholds. The traffic on the nearby roadways would be the predominant noise sources and the noise levels associated with landfill operations would be less than significant. Nonetheless, some mitigation (e.g., berms, mufflers on construction equipment) was prescribed in order to further reduce operational noise. The future noise increases due solely to the additional traffic generated by the expansion project ranged from 0.3 to 4.9 dBA. All of the mobile-source noise increases were estimated to be less than the 3 dBA threshold of significance, with the exception of one location: Avenue F east of Division Street, where a maximum noise increase of 4.9 dBA was projected due to the increase in haul trucks utilizing Avenue F. However, that noise projection indicated that the future noise levels with the project would be less than 65 dBA CNEL and, therefore, less than significant.

Current Noise Analysis

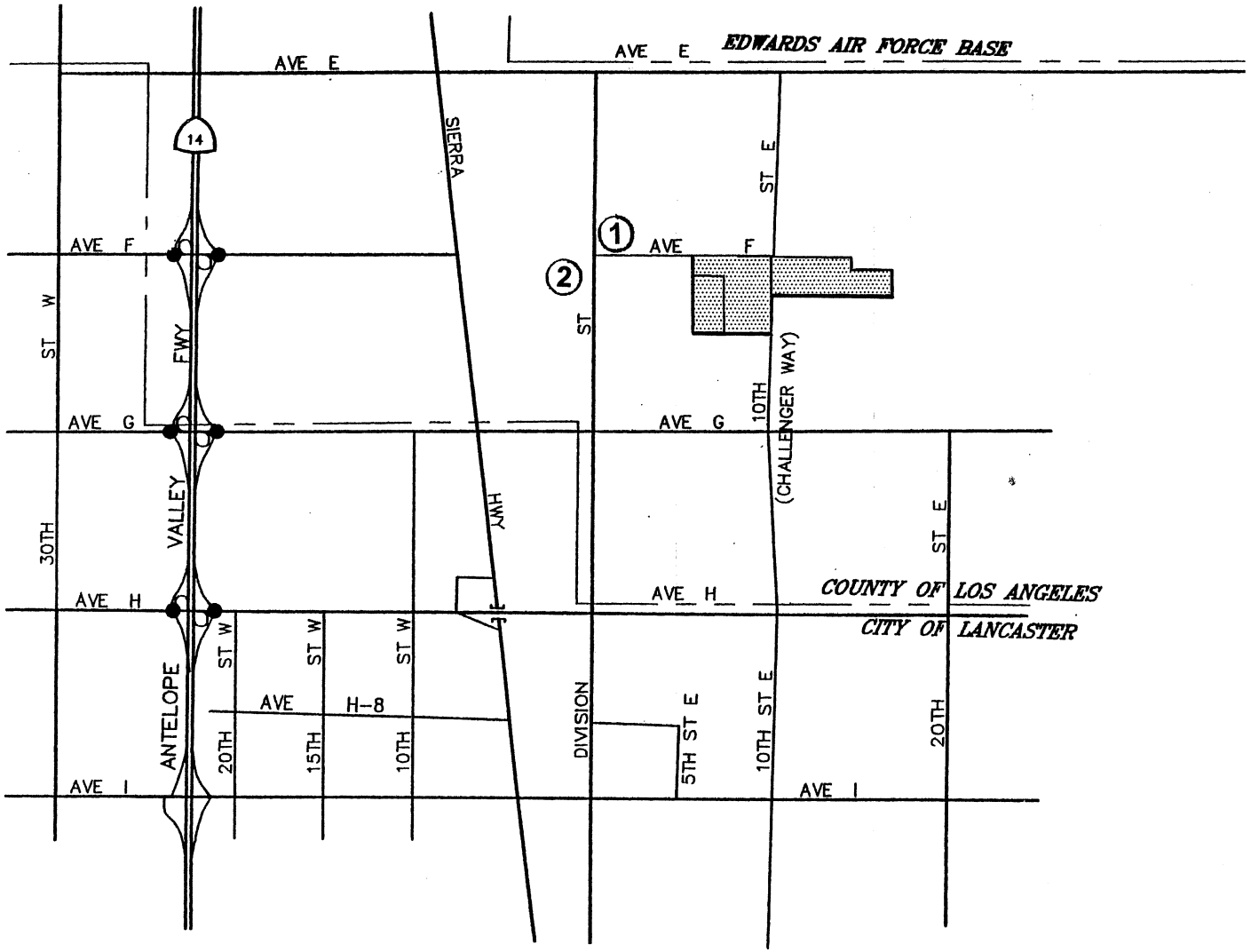
An acoustical analysis was prepared by Giroux & Associates (dated August 31, 2004) to evaluate the potential noise impacts associated with the proposed increase in both vehicular traffic and heavy equipment operations resulting from the increase in daily tonnage accepted at the LLRC. The findings and recommendations presented in that analysis are summarized below and the analysis is included as Appendix D.

4.3.1 Existing Conditions

Baseline Noise Levels

Existing noise levels throughout the project vicinity derive almost exclusively from the vehicular sources on the streets in the area. Construction activities from current area-wide development create localized noise impacts around individual construction projects. These activities will cease at area buildout, but roadway traffic noise will increase in direct proportion to the number of vehicles on area roadways.

In order to best characterize ambient noise levels near the project site, long-term noise monitoring (48 hours) was conducted at the nearest sensitive receptor locations to the Lancaster Landfill and Recycling Center (LLRC) potentially exposed to landfill traffic noise. These homes are located approximately three-fourths mile west of the facility. Measurements were made at two sites. Monitoring Site No. 1 is located on the north side of "F" Street, east of the "F" Street/Division Street intersection at existing single-family residences, which are approximately one-half mile from the site. Monitoring Site No. 2 is located at the existing mobile home park, which is located on the southwest corner of the "F" Street/Division Street intersection, approximately three-fourths of a mile from the LLRC. Noise monitoring locations in relation to project site are shown in Figure 4.3-1. Ambient noise levels at each monitored site are reflected in Table 4.3-1.



N NO SCALE

KEY

= PROJECT SITE (EXISTING LANDFILL)

1 - Single-Family Residential

2 - Mobile Home Park

Figure 4.3-1
Noise Monitoring Locations

Table 4.3-1

Ambient Noise Levels
Lancaster Landfill and Recycling Center

Monitoring Location	Day 1 CNEL	Day 2 CNEL
Site 1 – Single-Family Residential	62.6 dBA	63.6 dBA
Site 2 – Mobile Homes	62.0 dBA	61.0 dBA
SOURCE: Giroux & Associates (2004)		

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

Levels of less than 65 dBA CNEL are considered acceptable for residential use in usable outdoor space such as patios, spas/pools, backyards, etc. The measured levels are less than 65 dBA CNEL, and occur in front yards. Rear yards are farther setback from the roadway, and are also shielded by the homes themselves. Existing noise exposures at the nearest noise-sensitive land uses are therefore within County standards.

In contrast to most residential communities, peak noise hours are generally mid-day from 10:00 a.m. to 2:00 p.m. rather than during the a.m. or p.m. commuting hours. The mid-day noise numbers are not dramatically different from the a.m. or p.m. commuting period. The difference is enough, however, to suggest that daytime landfill traffic has a more noticeable noise effect than the small number of local area commuters.

Los Angeles County Noise Standards

CNEL-based standards are used to make land use decisions as to the suitability of a given site for its intended use. They apply to those noise sources not amenable to local control such as on-road traffic, aircraft, trains, etc. There are no on-site uses that would require detailed consideration of any CNEL-based exterior noise standards. Project-related noise issues would center more on noise from increased landfill operations possibly impacting nearest residences rather than from site suitability to the ambient noise environment. Those noise sources that are not pre-empted from local control are regulated by ordinance. Noise levels from on land use crossing the property line of an adjacent property are regulated by Section 12.08.390 of the Los Angeles County Code. These standards are expressed in terms of a mean (50th percentile) noise level, with allowable excursions from the mean (refer to Table 4.3-2). The larger the excursion, the shorter the allowable deviation, up to a maximum of 20 dB above the mean standard.

Table 4.3-2

Los Angeles County Noise Standards
Lancaster Landfill and Recycling Center

Noise Zone	Land Use (Receptor Property)	Time Interval	Exterior Noise Level (dB) for Standard Number				
			1 (L_{50})	2 (L_{25})	3 ($L_{8.3}$)	4 ($L_{1.7}$)	5 (L_0)
I	Noise-Sensitive Area	Anytime	45	50	55	60	65
II	Residential Properties	10:00 p.m. to 7:00 a.m. (Nighttime)	45	50	55	60	65
		7:00 a.m. to 10:00 p.m. (Daytime)	50	55	60	65	70
III	Commercial Properties	10:00 p.m. to 7:00 a.m. (Nighttime)	55	60	65	70	75
		7:00 a.m. to 10:00 p.m. (Daytime)	60	65	70	75	80
IV	Industrial Properties	Anytime	70	75	80	95	90

1 – Los Angeles County Noise Standard No. 1, L_{50}: Noise levels which may not be exceeded for a cumulative period of more than 30 minutes in any hour. If the ambient L_{50} exceeds the levels listed above, then the ambient L_{50} becomes the exterior noise level for Standard No. 1

2 – Los Angeles County Noise Standard No. 2, L_{25}: Noise levels which may not be exceeded for a cumulative period of more than 15 minutes in any hour. If the ambient L_{25} exceeds the levels listed above, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

3 – Los Angeles County Noise Standard No. 3, $L_{8.3}$: Noise levels which may not be exceeded for a cumulative period of more than 5 minutes in any hour. If the ambient $L_{8.3}$ exceeds the levels listed above, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.

4 – Los Angeles County Noise Standard No. 4, $L_{1.7}$: Noise levels which may not be exceeded for a cumulative period of more than 1 minutes in any hour. If the ambient $L_{1.7}$ exceeds the levels listed above, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.

5 – Los Angeles County Noise Standard No. 5, L_0: Noise levels which may not be exceeded for any period of time. If the ambient L_0 exceeds the levels listed above, then the ambient L_0 becomes the exterior noise level for Standard No. 5

SOURCE: Los Angeles County Noise Ordinance

It is important to note that the County's CNEL-based compatibility standards for preempted sources (e.g., traffic, aircraft, etc.) are generally less stringent than for sources regulated by ordinance in Section 12.08.390 of the County's Municipal Code.

4.3.2 Significance Criteria

According to the most current CEQA Appendix G guidelines, noise impacts are considered potentially significant if they cause:

- 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. Thus, noise levels exceeding the Los Angeles County Noise Standards would be considered significant.

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The term "substantial increase" is not defined and is within the discretion of the lead agency to determine. The limit of perceptibility by ambient grade instrumentation (sound meters) or by humans in a laboratory environment is around 1.5 dB. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dB difference. A threshold of 3 dB is commonly used to define "substantial increase" by a variety of jurisdictions (e.g., City of Los Angeles CEQA Guidelines, City of San Diego CEQA Guidelines, etc.).

4.3.3 Potential Impacts

4.3.3.1 Short-Term Construction-Related Impacts

Two characteristic noise sources (i.e., noise associated with construction and that resulting from operational features) are typically identified with land use intensification such as that proposed for the proposed Lancaster Landfill and Recycling Center (LLCR) expansion project. Because there are no planned construction activities associated with the project, there are no construction noise impacts. Any potential impacts are operational-related and are evaluated in Section 4.3.3.2.

4.3.3.2 Long-Term Operational Impacts

Project-related noise impacts may derive from on-road traffic, as well as from on-site landfill operations. The project-related area-wide traffic noise impact has already been incorporated into noise mitigation required for all residential and other noise sensitive development constructed adjacent to any of the circulation element and general plan roadways. Project-related noise impacts would derive almost exclusively from on-site noise sources possibly impacting the nearest adjacent residences.

Increased landfill activities, especially increases in heavy equipment, could create noise impacts near the project site. Unless such activities occur near noise-sensitive residential uses, impact potential is minimal. Upon implementation, project-related increases in outbound and inbound haul trucks could cause an incremental increase in long-term, area-wide noise levels throughout the project area. Traffic noise impacts are generally analyzed both to insure that the project not adversely impact the acoustic environment of the surrounding community, as well as to insure that the project site is not exposed to an unacceptable level of noise resulting from the ambient noise environment acting upon the project. There are no project-siting constraints for the LLCR, therefore the focus of the noise analysis is on the community.

On-Road Hauling Noise Impacts

Noise could increase as a result of project-related traffic and increases in hauling trucks. The proposed daily landfill disposal rate increase is designed to accommodate the demand for increased refuse from the growing population and from other landfill closures in Los Angeles County. The same vehicles and haul trucks would be on local roads driving out of county, or possibly out of state for the same landfill resources if they were not available locally.

Project-related traffic noise was calculated for existing and near-term scenarios based upon existing traffic volumes and near-term forecasts. Six roadway segments were analyzed for four different scenarios (Year 2003 Existing, Year 2004 No Project; Year 2004 With Project, With Avenue "F"

Extension; Year 2004 With Project, No Avenue "F" Extension. The vehicle mixes (truck percentages) observed on local area roadways were used to calculate vehicle noise.

The proposed increase in the daily disposal rate will derive mainly from a conversion from a vehicle fleet of packer trucks to one of transfer trailers. The noise model considers both types of trucks to have equal noise generation. The total traffic noise impact will derive from +27 trucks and a few operating personnel commuting trips. The results of the traffic noise impact analysis are shown in Table 4.3-3. The maximum increase in traffic noise attributable to the project is +0.6 dB along Avenue F, east of SR-14. Increases of +0.6 dB are undetectable even under laboratory conditions, and well below the +3 dB significance threshold.

Table 4.3-3

Traffic Noise Impacts (dB CNEL)[1]
Lancaster Landfill and Recycling Center

Roadway/Segment	2003 Existing	2004 No Project	2004 w/Project w/Avenue F Ext.	2004 w/Project No Avenue F Ext.
Avenue F				
West of SR-14	58.1	58.4	58.4	58.4
East of SR-14	60.7	61.0	61.3	61.0
Avenue G				
West of SR-14	N/A	N/A	47.8	47.8
East of SR-14	57.8	58.1	58.1	58.1
Avenue H				
West of SR-14	64.5	64.5	64.8	64.8
East of SR-14	66.5	66.8	66.9	66.9

[1]Noise levels estimated at 50 feet from roadway centerline.

SOURCE: Giroux & Associates (2004)

Table 4.3-3 shows that traffic noise at 50 feet from the centerline of most project vicinity roadways is in the high 50 to mid-60 dB range. These predicted noise levels are mostly below the County land use standard for residential uses, and the project adds negligibly to these noise levels.

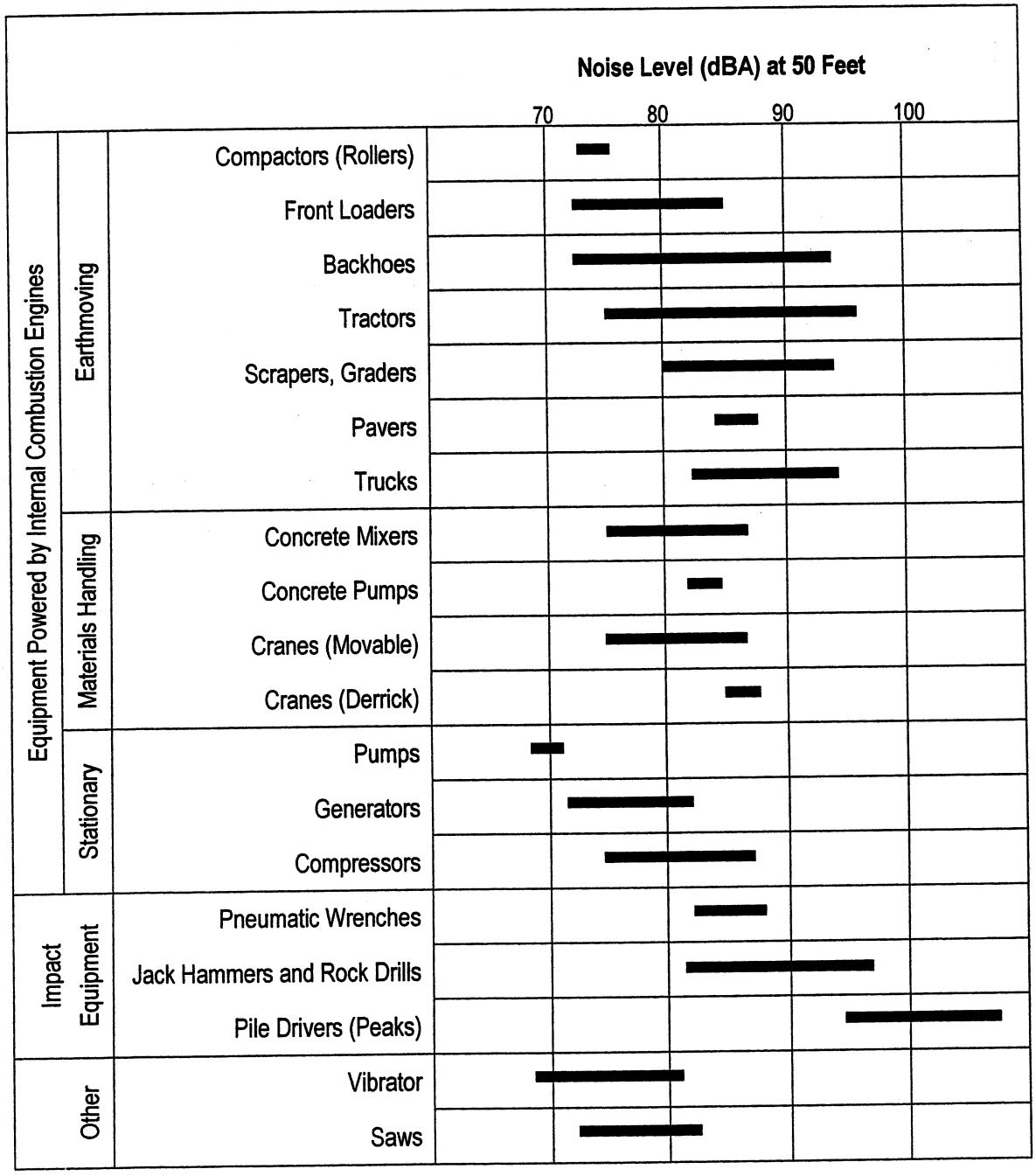
Operational Noise Impacts

Landfill operations noise impacts can occur as a result of on-site heavy equipment used in earthmoving activities, compaction processes, recycling, and grinding, as well as on- and off-site on-road refuse haulers. Figure 4.3-2 shows the typical range of noise generation as a function of equipment used in landfill operations.

The earth-moving sources are seen to be the noisiest with equipment noise ranging up to about 90 dB(A) at 50 feet from the source. Measurements have shown, however, that the noise emission levels in Figure 4.3-2 tend to be more associated with periodic events under full load rather than chronic (hourly or longer) noise exposure. Short-term noise generation thus tends to be on the higher end of the ranges shown in Figure 4.3-2, while longer-term exposure is at the quieter end of the noise spectrum.

Figure 4.3-2

Typical Equipment Noise Generation Levels



Source: EPA PB 206717, Environmental Protection Agency, December 31, 1971, "Noise from Construction Equipment and Operations."

Spherically radiating point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance, or about 20 dB in 500 feet of propagation. The loudest earth-moving noise sources will therefore sometimes be temporarily detectable above the local background beyond 1,000' from any individual operations area. An extensive noise impact envelope requires a clear line of sight from source to receiver. Landfills have irregular terrain that changes over the life of the project. Terrain screening of heavy equipment reduces noise impacts to any nearby sensitive-source receivers.

The Lancaster Landfill and Recycling Center activities are regulated by specific sections of the Los Angeles County Noise Ordinance (e.g., § 12.08.380 and § 12.08.390). These sections provide noise standards, as well as allowable hours of certain activities. As shown previously in Table 4.3-1, residential and industrial properties have different exterior noise standards. When adjacent properties in the County of Los Angeles have differing noise standard values, then the mean of the exterior noise levels becomes the standard (12.08.390C). The noise compliance standards at the boundary between a residential and industrial property are reflected in Table 4.3-4.

Table 4.3-4

Los Angeles County Noise Compliance Standards
Lancaster Landfill and Recycling Center

Time	Mean (L50) DB	Maximum (Lmax) dB
7:00 a.m. to 10:00 p.m.	60	80
10:00 p.m. to 7:00 a.m.[1]	57	77

[1]The nighttime standard applies to only two hours of landfill operations.

SOURCE: Los Angeles County Noise Ordinance
Giroux & Associates

Landfill equipment operates intermittently while excavating or hauling dirt, or while compacting refuse and cover soil. Equipment operates at full power for much less than 30 minutes per hour. The applicable noise performance standard is therefore the Lmax standard instead of the 50th percentile reading (L_{50}). There will be no substantial change in the number of pieces of heavy equipment operating at the landfill as a result of the proposed project. The noise "envelope" from a single piece of equipment with a 95 dBA Lmax at 50 feet is reflected in Table 4.3-5.

Table 4.3-5

"Worst Case" Noise Envelope
Lancaster Landfill and Recycling Center

Daytime Standard (7 a.m. to 10 p.m.) (80 dBA Lmax)	Nighttime Standard (10 p.m. to 7 a.m.) (77 dBA Lmax)
280 Feet	400 Feet

SOURCE: Giroux & Associates (2004)

The nearest noise-sensitive land uses are located well beyond 400 feet from the landfill. There are no known recorded noise complaints from landfill operations filed with the LEA for this facility. There are no sensitive receivers currently exposed to excessive heavy equipment noise, and project implementation will not change that condition.

Sanitary landfills employ other activities as part of normal business operations that may impact the closest residences, mainly refuse unloading activities. The Los Angeles County Noise Ordinance addresses this issue in Section 12.08.460. Unloading operations between the hours of 10:00 p.m. and 6:00 a.m. are prohibited; however, the approved CUP allows the LLRC to begin operating at 5:00 a.m. Single-event noise such as the "beep" from back-up alarms would be potentially intrusive because background noise conditions are low. Reasonable reduction of such maximum noise is recommended as possibly nuisance abatement.

4.3.4 Mitigation Measures

Project implementation will not result in any significant increases in either the ambient or future noise levels associated with project-related truck traffic and future traffic related to regional growth and development. Nonetheless, the mitigation measures prescribed in EIR SCH No. 1993101036 still apply and shall continue to be implemented as required.

- If residential development has occurred near landfill construction, limit construction hours to 7:00 a.m. to 7:00 p.m. No construction on weekends or Federal holidays.
- As development occurs in new cells, construct berms to limit off-site impacts.
- Tune equipment and maintain equipment noise mufflers.

4.3.5 Level of Significance After Mitigation

Although the potential for single-event noise that may be intrusive occurs at the present time for existing operations at the LLRC, project implementation will not result in significant adverse noise impacts. No additional mitigation measures are required and no significant unavoidable adverse impacts will occur as a result of project implementation.

4.4 WATER QUALITY/WATER DEMAND

EIR SCH No. 1993101036 includes an analysis of water quality conditions associated with the expansion of the LLRC. A computer model was used to estimate the leachate production during various stages of operation and after closure of the LLRC, which indicated that the leachate production maximum peak rate will be 80 gpd for the largest collection area of landfill before final cover is installed. Based on the results of the model analysis, the estimated leachate rate averaged 50 gpd.

The five groundwater recharge wells in the Eastern Area will be abandoned prior to landfill developed activities in the area. The abandoned wells could provide direct conduits to the underlying aquifers and could accelerate groundwater contamination if leachate leakage occurred through the landfill liner system, which would be a potentially significant impact. However, that potential impact is mitigated through compliance with the protocols for well destruction mandated by the California Department of Water Resources, including installation of the base liner system and the LCRS and the implementation of a proactive water quality monitoring program. In addition, another measure incorporated into the expansion project included sealing and decommissioning by pressure grouting (or other suitable method) of the existing wells prior to landfill development.

Reduced infiltration over the footprint of the landfill would also result in less than significant changes in the configuration of the water table. The main source of groundwater recharge to the Lancaster sub-basin is runoff from the San Gabriel Mountains, and not direct infiltration through the floor of the basin. Finally, the project is not located on a watershed tributary to a major river or body of standing water and would not have a significant impact on any perennial sources of water.

4.4.1 Existing Conditions

The LLRC is a Class III municipal solid waste landfill that operates under permits issued from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB), California Integrated Waste Management Board (CIWMB), County of Los Angeles, and Antelope Valley Air Quality Management District. The facility is located on a 276-acre parcel, of which 209 acres are currently permitted for waste disposal. The active waste footprint is roughly "L" shaped on the portion of the facility west of Challenger Way (also known as 10th Street East). The administrative offices and maintenance facilities are located at the northwest end of the property.

Site specific geologic and hydrogeologic conditions at the LLRC warranted design of a waste containment (liner) system that at a minimum meets the California and federal standard design criteria as specified in 27 CCR, Article 4 and 40 CFR, 258.40. Although a prescriptive liner design was developed for use within the Eastern and Western Areas of the LLRC, an alternative line design was developed and has been approved and constructed in the Western Area, which consists of bottom and side slope systems. This base liner system includes (from top to bottom) the following components: a minimum 12-inch thick gravity drainage layer; a geotextile; a 60-mil HDPE geomembrane; and a geosynthetic clay liner (GCL) placed on the finished subgrade. The liner design consists of two barrier components (i.e., 60-mil HDPE and geosynthetic clay liner) in place of the 24-inch thick layer of low-permeability material meeting a hydraulic-conductivity of 1 x 10^{-7} cm/sec. The GCL component of the liner renders an effective performance characteristic that exceeds the prescriptive standard low-permeability soil layer component.

Groundwater

The LLRC is within the Antelope Valley groundwater basin. According to the Basin Plan developed by the Lahontan Regional Water Quality Control Board (October 1994), beneficial uses and potential uses of groundwater from the Antelope Valley basin include municipal, agricultural, and industrial water supply. Beneficially used aquifers are within Quaternary age alluvial basin fill, which consists of sand, gravel, and some finer grained materials. In the area of the LLRC, there are two major aquifers, the unconfined

upper "Principal" aquifer and the confined lower "deep" aquifer (Leighton and Phillips, 2003). These two aquifers are separated by fine-grained lacustrine deposits that consist principally of plastic clay. The Principal aquifer has been defined as the alluvial deposits that overly the lacustrine deposits in the part of the groundwater basin south and west of Rogers Lake. In the LLRC area, regional groundwater flow in the Principal aquifer is southeasterly towards a cluster of irrigation wells developed on the alluvial fan of Little Rock Creek (Joint Technical Document, February 2000, Bryan A. Stirrat and Associates).

Groundwater beneath the landfill is encountered at depths ranging from approximately 50 to 75 feet below ground surface in the Principal Aquifer. The Principal Aquifer groundwater is unconfined across most of the site, but is semi-confined in some areas due to other clay layers in the Quaternary alluvial deposits. The deep aquifer located beneath the clay is not hydraulically connected to the Principal Aquifer in the immediate vicinity of the LLRC. Groundwater flow has been determined to be generally southeasterly.

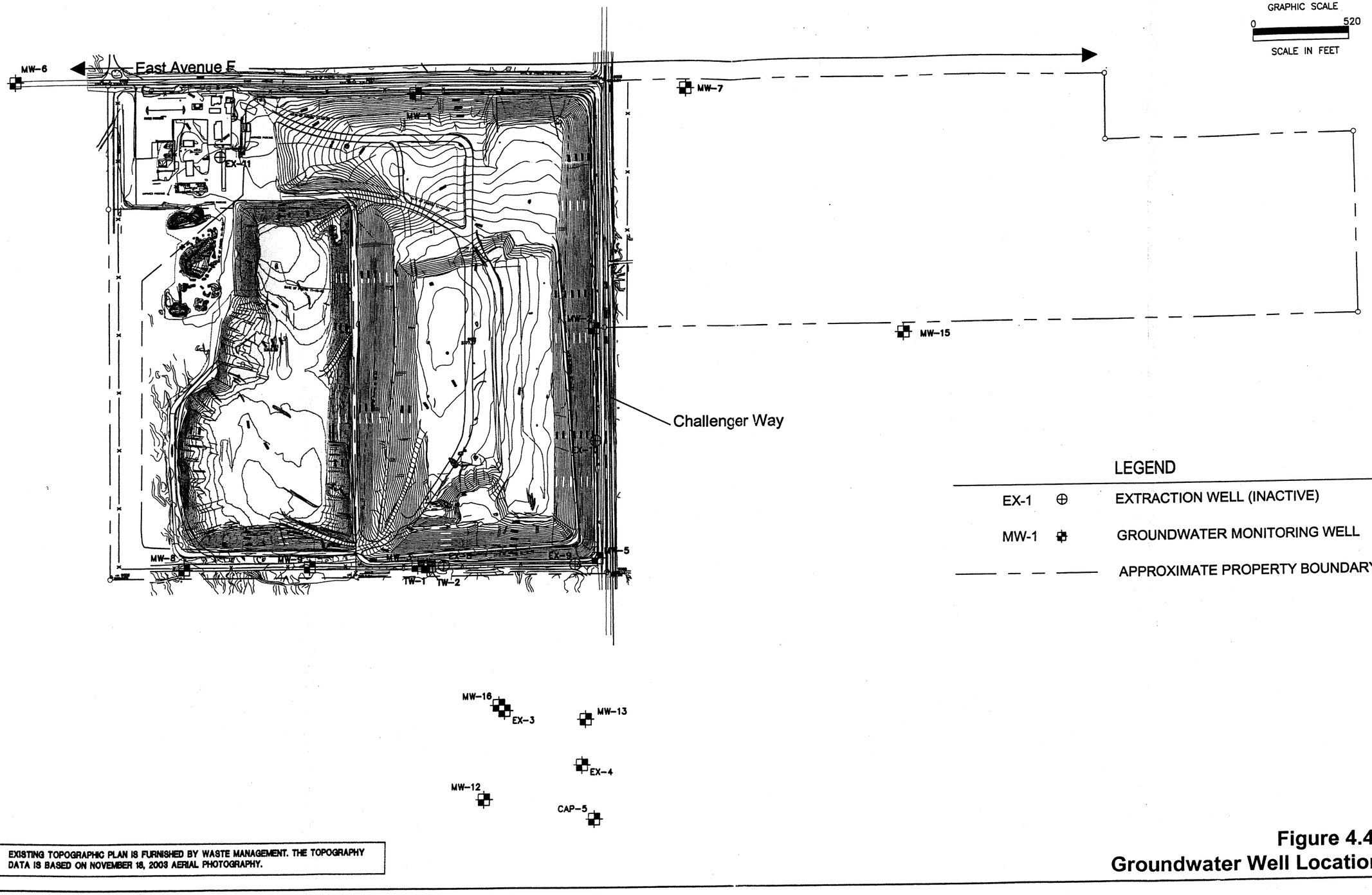
On-site water chemistry in the Principal aquifer is predominantly calcium bicarbonate with total dissolved solids in recent samples ranging from approximately 150 to 170 milligrams per liter (mg/l). Wells have been installed on-site in the deep aquifer for the purpose of water production. Two production wells, located in the operations area near the site offices and scale house, are currently active at the LLRC. One well, supplying water for hand washing and the like in on-site facilities, was installed in 1977 and is screened between 227 and 307 feet below grade. The concentration of total dissolved solids in a sample taken in 2003 from this well was 154 mg/l. The second well, supplying water for dust control, was installed in 2004 and is screened from 778 to 991 feet below grade. Based on recent water consumption figures, it is estimated that this latter well may pump 60 acre-feet of groundwater per year. This can be compared with a basin-wide groundwater withdrawal of an estimated 70,000 to 75,000 acre-feet per year during recent years (Leighton and Phillips, 2003), and a total estimated storage capacity of 70,000,000 acre feet (California Department of Water Resources, Bulletin 118, September 1995). The water extracted from this on-site well represents less than 0.001 percent of the basin-wide withdrawal. The Los Angeles County Environmental Health unit states that there are three other privately-owned production wells used for drinking water located within a one-mile radius of LLRC. The three wells are located near East Avenue F and Division Street, approximately one-half to three-quarters of a mile west of LLRC.

Groundwater Monitoring

Groundwater monitoring has been conducted at LLRC since 1987 in order to comply with 27 CCR Article 1 requirements as implemented through site specific WDR Order No. 6-87-11 and later WDR Order No. 6-00-55 issued by the Lahontan RWQCB. The current water quality monitoring system has been designed and certified by a registered professional in accordance with 27 CCR 20415(e)(1) and includes regular sampling at 11 groundwater wells (refer to Figure 4.4-1). State standards address water quality protection, including groundwater monitoring. Water quality is also protected by control systems that are part of the fill design for the LLRC, including the landfill gas (LFG) extraction and flare system, which began operation at the site in February 1993, and the leachate management system.

The water quality monitoring system at LLRC meets these standards through the design and operation of its monitoring system and, when necessary, through corrective action. The overall objectives of the monitoring system for the LLRC are:

- characterization of background groundwater quality;
- detection of changes in water quality that may be indicators of leachate migration or LFG impacts;
- measuring groundwater elevations and determining gradients, groundwater flow direction, and velocity; and



EXISTING TOPOGRAPHIC PLAN IS FURNISHED BY WASTE MANAGEMENT. THE TOPOGRAPHY DATA IS BASED ON NOVEMBER 18, 2003 AERIAL PHOTOGRAPHY.

Figure 4.4-1
Groundwater Well Locations

NO.	REVISION	DATE

FIGURE TITLE: GROUNDWATER MONITORING PLAN

PROJECT TITLE: LANCASTER LANDFILL AND RECYCLING CENTER

CLIENT: A Waste Management Inc. Company

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3711 LONG BEACH BLVD., 9th FLOOR
LONG BEACH, CA 90807
PH. (562) 426-9544 FAX. (562) 427-0805

PROJ. NO. 01201023.00 Task2 | DWN. BY: APH | ACAD FILE: | APP. BY: KWG
CHK. BY: TQS | CHK. BY: TQS

DATE: SEPT 2004

SCALE: 1" = 520'

J:\SW_0085\2001\01201023\Electronic Files from Previous Consultants\ERI FIGURE (SEP. 2004).dwg Sep 28, 2004 - 12:9pm By: 2409lcf

- gauging the effectiveness of the implemented Correction Action Program (CAP), which includes landfill gas control and Monitored Natural Attenuation (MNA).

In response to the detection of volatile organic compounds (VOCs), a Verification Monitoring Program was voluntarily initiated in 1988. This program consisted of sampling of existing groundwater monitoring wells, installation and sampling of new wells, drilling and sampling of temporary monitoring points, stratified groundwater sampling, soil vapor sampling, and other investigations. Groundwater investigations continued through 2002 and, as a result of these, a Corrective Action Plan was developed. Corrective action has involved extraction and treatment of impacted groundwater and improvements to the LFG control system to address VOC impacts to groundwater.

CAP evaluation was recently completed (Corrective Action Program Pilot Study Report and Monitored Natural Attenuation Plan, SCS, December 2003) and it was determined that no adverse affects on water quality would result from groundwater extraction well shut down. In addition, the pilot study provided further evidence that VOC impacts to groundwater had been the result of gas-phase migration and phase transfer, and that natural attenuation of VOCs is occurring. In order to ensure that water used on-site is not used as drinking water, employees at landfill are instructed on the sources of drinking water that is available at the LLRC, which includes water in coolers and bottled water. Also, there are no drinking fountains located on-site and there is no kitchen for obtaining water from a faucet. Water that is not intended for drinking is clearly labeled as such.

Based on the pilot study, landfill gas control and MNA were recommended for mitigation of VOCs in groundwater at the facility. MNA refers to the reliance on closely monitored natural attenuation processes for corrective action. At this time, WMI is awaiting comments on this recommendation from the RWQCB.

Leachate and LFG Control and Monitoring Systems

Leachate is generated when water passing through the refuse reacts chemically and biologically with refuse contents. Leachate generation is minimized in the Lancaster area due to the arid climate and drainage control efforts at the LLRC. At some landfills, migration of leachate from the fill can cause impacts to groundwater, although there is no evidence that this has occurred at the LLRC. The leachate management system at the LLRC is intended to prevent or minimize leachate generation, detect leachate generation, contain and collect generated leachate within designated sumps, and reclaim any resulting wastewater. When leachate is detected and removed from collection sumps, it will be recirculated into the waste over lined areas; used for on-site dust control, if approved by the RWQCB and LEA; or hauled to an appropriate off-site treatment facility.

Landfills that receive organic wastes in some significant quantity eventually produce "landfill gas." The decomposition of these organic wastes within the refuse prism generates landfill gas as a by-product. This gas generally consists of equal amounts of methane and carbon dioxide along with traces of other constituents. The production of landfill gas within the refuse cell is of interest primarily due to the flammability of methane in concentrations between five and 15 percent by volume in air. State and federal regulations require the control of landfill gas to prevent it from migrating away from the landfill boundaries and accumulating in off-site structures. In addition, local air pollution control districts and state and federal air quality regulations require the control of emissions into the atmosphere.

A LFG extraction system began operation at the LLRC in February 1993. Since this time, the LFG system has been continuously upgraded and is providing protection against gas phase migration of VOCs to groundwater. Since vapor phase VOCs are normally entrained in LFG, migration of the gas, and gas to water phase transfer, can facilitate migration of these substances to groundwater. Controlling LFG migration is thus an important element of the groundwater quality protection strategy. The LFG extraction system consists of a series of wells, placed in the waste fill, connected to a header pipe network. A vacuum is applied to the header, drawing LFG out of the fill for destruction in a ground flare, and thereby preventing lateral migration of gas.

The current in-place gas control system consists of vertical gas extraction wells and horizontal collection piping. A permit application to operate the gas/condensate separation and holding system and flare/blower to incinerate the collected landfill gas has been issued by the SCAQMD and is now regulated by the AVAPCD. The flare station is located just north of the Western Area, adjacent to the groundwater remediation system, and consists of a gas burning flare and blowers. The system, including additional collection wells and flares, will be expanded as the landfill is developed to provide ongoing control within the performance criteria established and mandated by the AVAPCD and State and federal regulations. Figure 4.4-2 (Environmental Monitoring and Control Systems) illustrates the locations of the existing and proposed LFG control and monitoring facilities, including gas extraction wells as well as proposed perimeter gas monitoring probes and related facilities.

4.4.2 Significance Criteria

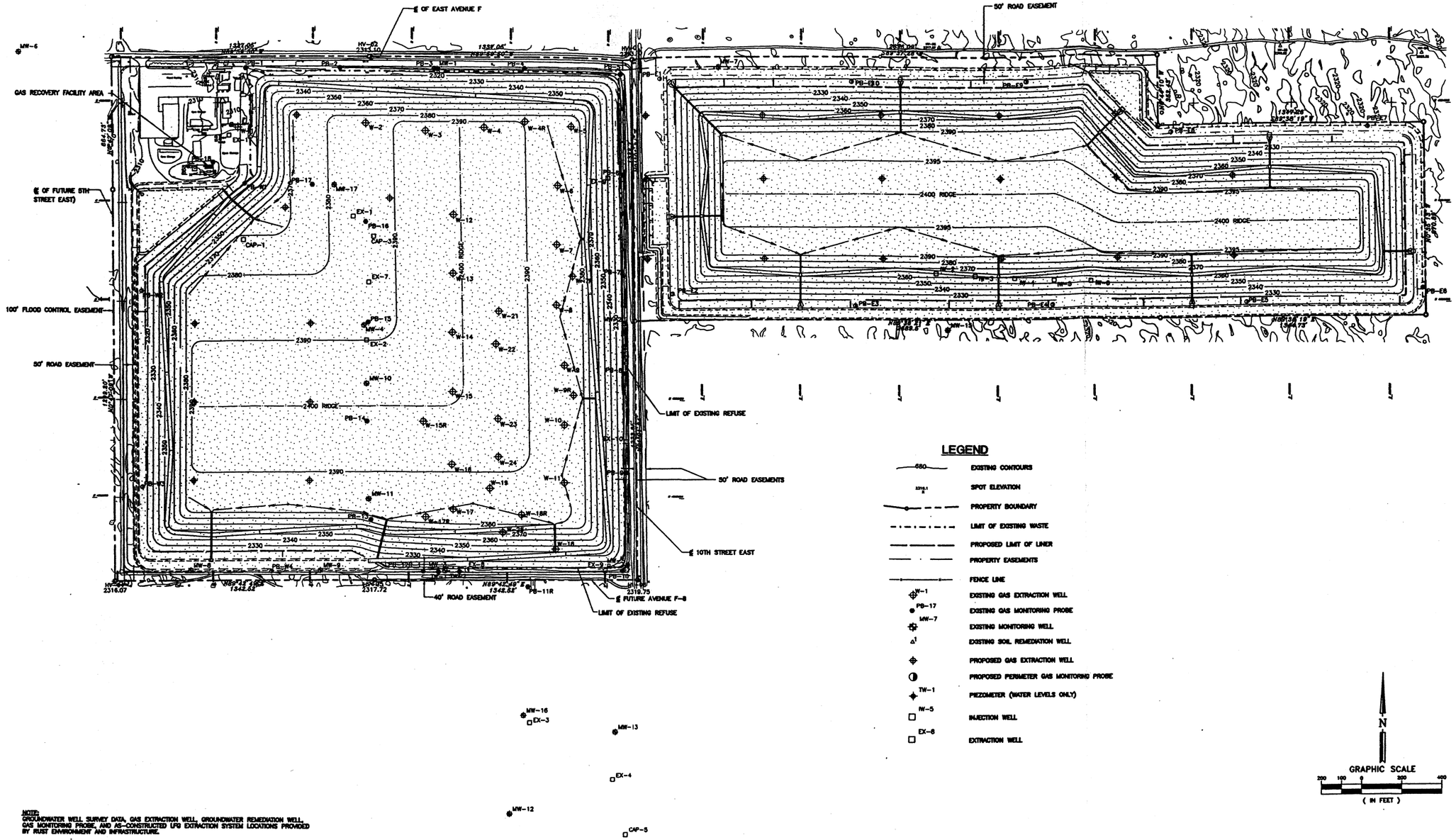
The proposed project would have a significant water quality impact if it would:

- Violate any water quality standards or waste discharge requirements.
- 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.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.

4.4.3 Potential Impacts

4.4.3.1 Short-Term Construction-Related Impacts

The proposed project will increase the permitted daily refuse accepted at the Lancaster Landfill and Recycling Center from 1,700 tpd to 3,000 tpd. This administrative revision to the existing Conditional Use Permit and Solid Waste Facilities Permit does not include any additional construction activities that potentially could result in short-term, construction-related impacts. All of the potential impacts will be long-term in nature, related to the daily operation and maintenance of the existing LLRC. These potential impacts are identified and described in Section 4.4.3.2.



LEGEND

- EXISTING CONTOURS
- SPOT ELEVATION
- PROPERTY BOUNDARY
- LIMIT OF EXISTING WASTE
- PROPOSED LIMIT OF LINER
- PROPERTY EASEMENTS
- FENCE LINE
- EXISTING GAS EXTRACTION WELL
- EXISTING GAS MONITORING PROBE
- EXISTING MONITORING WELL
- EXISTING SOIL REMEDIATION WELL
- PROPOSED GAS EXTRACTION WELL
- PROPOSED PERIMETER GAS MONITORING PROBE
- PIEZOMETER (WATER LEVELS ONLY)
- INJECTION WELL
- EXTRACTION WELL

GRAPHIC SCALE
200 100 0 200 400
(IN FEET)

NOTE:
GROUNDWATER WELL SURVEY DATA, GAS EXTRACTION WELL, GROUNDWATER REMEDIATION WELL, GAS MONITORING PROBE, AND AS-CONSTRUCTED LFG EXTRACTION SYSTEM LOCATIONS PROVIDED BY RUST ENVIRONMENT AND INFRASTRUCTURE.

EXISTING GROUNDWATER WELL SURVEY DATA

WELL	EASTING	NORTHING	TOC ELEV	WELL	EASTING	NORTHING	TOC ELEV
MW-1	4252116	4364470	2313.25	*EX-1	4251886.4	4383628.4	2283.8
MW-2	4253080	4363398	2318.03	*EX-2	4251788.2	4383302.1	2312.4
MW-3	4252173	4362137	2316.79	EX-3	4252611	4381364	2330.11
MW-4	4251785	4363378	2314.81	EX-4	4253038.4	4381066	2316.3
MW-5	4253104	4362159	2320.45	*EX-7	4251779	4383567	2314.90
MW-6	4249653	4364782	2308.72	EX-8	4252285	4382133	2316.37
MW-7	4253567	4364681	2312.07	EX-9	4252990	4384138	2316.50
MW-8	4250872	4362125	2321.00	EX-10	4253082	4382794	2319.33
MW-9	4251543	4362127	2320.48	EX-11	4251057	4384338	2312.67
MW-10	4251770	4363063	2316.23	*MW-4	4254574	4383851	2316.89
MW-11	4251788	4362484	2318.84	*MW-5	4254672	4383638	2316.59
MW-12	4252514	4360990	2325.92	*MW-8	4255071	4383828	2316.58
	(CAP 4)			*MW-9	4255288	4383816	2316.60
MW-13	4253047	4361307	2324.35	*MW-9R	4255468	4383816	2316.00
	(CAP 5)			*CAP-1	4251134	4383816	2315.79
**MW-14	4253155	4379631	2327.30	*CAP-2	4251801	4383827	2316.03
MW-15	4254734	4383394	2320.10	CAP-3	4253105	4380795	2326.32
MW-16	4252575.3	4361361.2	2321.5	*PB-17	4252181	4382125	2320.20
MW-17	4251601	4384087	2316.26	(PB-13)			
**MW-18	4254486.83	4380008.64	2331.31	*PB-2	4252182	4382125	2319.20
				(PB-17)			

*TO BE ABANDONED WITH PHASED DEVELOPMENT
**INDICATES OFFSITE ENVIRONMENTAL MONITORING POINTS

EXISTING GAS EXTRACTION WELL SCHEDULE

WELL DESIGNATION	WELL DEPTH (FT.)	LENGTH OF SOLID PIPE (FT.)	LENGTH OF SLOTTED PIPE (FT.)
EX-1	24	16	8
EX-2	24	16	8
EX-3	24	16	8
EX-4	24	16	8
EX-7	24	16	8
EX-8	24	16	8
EX-9	24	16	8
EX-10	24	16	8
EX-11	24	16	8
MW-4	24	16	8
MW-5	24	16	8
MW-8	24	16	8
MW-9	24	16	8
MW-9R	24	16	8
CAP-1	24	16	8
CAP-2	24	16	8
CAP-3	24	16	8
PB-17	24	16	8
PB-13	24	16	8
PB-2	24	16	8
PB-17	24	16	8

EXISTING GAS MONITORING PROBE SCHEDULE

GAS PROBE No.	NORTHING	EASTING
PB-1	4364782	4249653
PB-2	4364681	4253567
PB-3	4362125	4250872
PB-4	4362127	4251543
PB-5	4363063	4251770
PB-6	4362484	4251788
PB-7	4360990	4252514
PB-8	4361307	4253047
PB-9	4379631	4253155
PB-10	4383394	4254734
PB-11	4361361.2	4252575.3
PB-12	4384087	4251601
PB-13	4380008.64	4254486.83
PB-14	4383827	4251801
PB-15	4380795	4253105
PB-16	4382125	4252181
PB-17	4382125	4252182

PROPOSED PERIMETER GAS MONITORING PROBES

GAS PROBE No.
PB-W1
PB-W2
PB-W3
PB-W4
PB-W5
PB-W6
PB-W7
PB-W8
PB-W9
PB-W10

NOTES

1. Topography compiled by photogrametric method from aerial photography dated February 13, 1996.
2. Eastern expansion topography compiled by photogrammetric method from aerial photography date February 20, 1994.

Figure 4.4-2
Environmental Monitoring and Control Systems

BAS
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE
DIAMOND BAR, CALIFORNIA 19765

REV.	DATE	DESCRIPTION	DR BY	APP BY
DES BY	R.S.	3-1996	PROJECT NO.	DATE FEB. 1996
DRN BY	M.T.B.	3-1996	PROJECT TITLE	
CHK BY	M.A.C.	3-1996	LANCASTER LANDFILL AND RECYCLING CENTER	
ENV BY			SHEET TITLE	
ORV BY			ENVIRONMENTAL MONITORING AND CONTROL SYSTEMS	
APP BY			SHEET 10 OF 10	

Waste Management of Lancaster, Inc.
LANCASTER, CALIFORNIA 93535

SHEET NO. 10

4.4.3.2 Long-Term Operational Impacts

Groundwater

Increasing the daily allowable intake of waste would result in more rapid filling of the remaining airspace at the LLRC. More rapid filling is not anticipated to change the quantity of leachate that might be generated or the ultimate volume of LFG that would be produced. Leachate migration controls already in place at the LLRC and controls planned for the areas of the site not yet filled will not need to be modified to accommodate the increased filling rate. Although the total volume of LFG generated will not change, more rapid filling is anticipated to result in moving the peak of the LFG generation curve closer to the present. As part of the normal operating practice of the LLRC, this will mean that the periodic planned expansions of the LFG control system, necessary to accommodate the waste fill sequencing, would take place on a shorter schedule. This new schedule of LFG control system upgrades is anticipated to fully control the migration of gas and thereby protect groundwater from this source of potential contaminants and therefore no impacts to water quality are expected.

It is important to note that the groundwater characteristics identified in Section 4.4.1, which indicated that VOCs exist in detectable concentrations, will not change as a result of the proposed project. While VOCs may continue to be detected, it is anticipated that the existing landfill gas control system and MNA recommended for implementation at the LLRC will effectively mitigate VOCs at the landfill.

As indicated in Section 4.4.1, the landfill operator relies on water produced from deep aquifer wells located on the site for water used at the site. The deep aquifer well will continue to be the source of water used for dust suppression necessary for landfill operations and construction. Even if the demand for water necessary for dust suppression doubles on a daily basis from the current demand (i.e., 60 acre feet per year to 120 acre feet per year) as a result of the increase in daily capacity, the project-related demand for groundwater would be less than 0.001 percent of the total current withdrawal from the groundwater basin. As indicated previously, the basin-wide groundwater withdrawal is estimated to be 70,000 to 75,000 acre feet per year, with a total estimated storage capacity of 70,000,000 acre feet. This increase in demand is not significant because there is adequate groundwater in the basin to accommodate the increase in daily capacity. Further, it is important to note that the Lancaster Landfill does not currently depend on the County's potable water supplies and would not utilize other sources of domestic water. Therefore, it is anticipated that no impacts to domestic water supplies will occur as a result of project implementation.

Surface Water

Hydrological impacts associated with the LLRC have been previously evaluated and a surface drainage control system prescribed to ensure that no significant hydrological impacts would occur. No changes to the approved landfill plan are proposed that would change the conclusions and recommendations of the prior analyses conducted for the landfill. As indicated above, the only change anticipated to the hydrological condition is the accelerated rate of landfilling (i.e., 3,000 tons maximum daily capacity versus 1,700 tons per day under the existing SWFP and CUP). Although refuse cells may be filled at a faster rate based on the increased daily intake at the LLRC, the surface hydrology would not change from that previously analyzed. The infrastructure prescribed in the landfill plan would be implemented in order to accommodate the more rapidly changing surface conditions; however, those topographic conditions will be the same as identified in the adopted Landfill Plan for the LLRC. The storm drainage and flood control facilities approved for the LLRC are adequate to accommodate the proposed increase in daily capacity.

Interim drainage control within the excavated areas will be handled to minimize or eliminate surface water run-on into the excavated pits and the leachate control and removal system (LCRS). Interim drainage control will be an important function throughout active disposal operations, and special emphasis will be placed on stormwater management within the borrow excavations within the LLRC. Best Management Practices (BMPs) are currently in use at LLRC to effectively address runoff and potential erosion conditions. Specifically, LLRC has installed sediment and erosion control features to control surface water runoff and prevent erosion of slopes and surface soil layers. Controls include runoff control berms

and benches, proper land grading and final cover design and proper revegetative practices. Upon completion of refuse disposal operations, a final cover layer of compacted soil and/or a synthetic cap will be placed over the landfill to retard the infiltration of precipitation. A vegetation program will also minimize erosion. In addition, surface roughening is utilized. The soil is roughed by the creation of horizontal grooves, or indentations that run parallel to the contour of the land. The grooves are created by the dozer and compactor. Future permanent drainage systems will include corrugated steel pipes and culverts to eliminate erosion potential from major conveyances.

Stormwater management within the excavation areas below grade is addressed through the implementation of several drainage control system features and/or procedures:

- HDPE liner flaps
- interim slope grading
- earthen berms
- sand bags and/or silt fences
- high volume stormwater pumps

Run-on into the below grade excavation areas will be eliminated and/or minimized through the use of earthen berms and perimeter drains along the top edge of the interim cut slopes. Therefore, stormwater will be minimized to only that volume of precipitation falling over the excavated areas within the LLRC. Precipitation over the areas within the LLRC that are excavated for use as daily cover material is channeled via benches to temporary stormwater collection basins or sumps. Stormwater collected in the temporary collection basins or sumps will then be pumped to the perimeter drainage channels, located at existing grades along the outside edges of the units. Stormwater will then be handled in accordance with the current stormwater management procedures discussed below.

On-site drainage features are intended to control run-on to or run-off from the landfill areas. Stormwater on the landfill deck will sheet flow until it is intercepted by a berm located around the deck perimeter. The deck berm will then direct run-off flows to asphalt concrete (AC) downdrains. The AC downdrains will be perpendicular to slope contours and located on top, and anchored into, the final landfill slope surface. The downdrains will be extended up completed side slopes of the landfill as the filling progresses. The downdrains will also accommodate inlets at each bench. The gradient of these downdrains will follow the surface of the refuse slope (typically 3:1). The downdrains will outlet at rock energy dissipaters within the perimeter drainage channels that direct flow into a sedimentation basin. Stormwater from the landfill side slopes will sheet flow onto the intermediate benches which will convey the flows to bench downdrain inlets. Run-off conveyance structures will have a minimum slope of 0.2 percent.

A blue line watercourse runs through a portion of the LLRC as indicated on the USGS topographic map of the site and surrounding area. Off-site run-on from the tributary drainage area to the blue line stream is conveyed by a 3-foot high interceptor earthen berm installed along the south, east and west perimeter areas of the Eastern Area. The interceptor berm diverts flows anticipated for a 100-year storm event from the upstream tributary drainage area. It is important to note that implementation of the proposed project will not result in any changes to the manner in which surface drainage within the LLRC is accommodated. The proposed project is consistent with the drainage plan approved for the LLRC. As a result, implementation of the drainage plan and the measures prescribed in the Final EIR adequately address stormwater runoff as a result of landfill activities.

Upstream development and associated flood control facilities affecting the total run-on to the subsequent areas within the LLRC will be reevaluated and appropriate changes to the currently proposed perimeter drainage control features will be made. In support of any changes, the operator will complete an updated hydrology study. It should be noted that a Los Angeles County Flood Control District easement is located in that area along 10th Street and that flood control improvements planned by the County in that area will also be accounted for in the final design.

A perimeter drainage channel exists for the site, which is composed of graded trapezoidal and triangular channels around the refuse footprint. The channels are intended to control run-on from surfaces adjacent to the landfill that would normally flow onto the landfill site. For the LLRC, the perimeter drainage channel also serves as the conveyance system for on-site flows originating on the landfill. The stormwater conveyed by the on-site perimeter ditch will outlet into one of the sedimentation basins located within the subject landfill.

There currently exist a number of storm drain facilities around the existing landfill. These existing features have been upgraded, as required, to serve as part of the final drainage plan. Intermediate deck drains and downdrains will be required and will be extended and upgraded as waste filling progresses.

Implementation of the proposed project will not result in any changes to the potential for erosion anticipated by existing and continue landfilling activities at the LLRC. As indicated in the 1997 EIR, changes in topography and ground surface relief will occur as the landfill is modified to accommodate the refuse disposal. Along with such landform modification, the prior EIR prescribed permanent stormwater and erosion controls to be implemented during landfill construction. As a result, the potential for soil loss associated with landfill activities will be minimized. Excessive soil loss is addressed by limiting the distance water must travel before reaching a channel or other drainage structure. Additional measures that are implemented include, but are not limited to silt fences, bale dikes, wood chips, and sand bags (Final EIR, 1997). These measures, which include sedimentation ponds, drainage facilities, revegetation, etc., will continue to be implemented as landfilling occurs in the future at the site. Further, maintenance of the sedimentation basins within the LLRC is conducted annually and will continue throughout the post-closure maintenance period. The landfill will be revegetated upon closure, which will serve as the primary erosion control feature. Therefore, as indicated above, no significant erosion impacts would occur as a result of the increase in daily capacity and no additional mitigation measures are required.

4.4.4 Mitigation Measures

No significant impacts are anticipated as a result of project implementation. The LLRC has been designed to accommodate surface runoff and to minimize impacts to both the surface water and groundwater quality, including the potential for erosion. Continued compliance with all applicable regulations and the environmental protection measures that are applicable to the site will continue to reduce or eliminate potential storm runoff and water quality impacts associated with the landfill operations to a less than significant level. Further, adequate groundwater supplies are available to support landfill activities (e.g., dust suppression, etc.). No additional mitigation measures are required. Nonetheless, the mitigation measures prescribed in EIR SCH No. 1993101036 still apply and shall continue to be implemented as applicable. These measures include:

- Design and construct leachate control and removal system (LCRS) to consist of collection pipes, collection sumps and liner as described in Figures 5.5-2 and 5.5-3 in Draft EIR.
- Periodic monitoring of surface water quality in accordance with site's existing Storm Water Pollution Prevention Plan (SWPPP).
- Implement a proactive Water Quality Monitoring Program in compliance with State and Federal regulations.
- Decommission existing wells by pressure grouting or by another suitable method prior to landfill development, and strict adherence to the protocols for wells construction mandated by the California Department of Water Resources.

4.4.5 Level of Significance After Mitigation

Implementation of the mitigation measures prescribed at the time the landfill expansion was approved will continue to reduce the potential water quality impacts (i.e., erosion) to a less than significant level. No significant adverse impacts associated with hydrology and/or water quality will occur.

CHAPTER 5.0
IMPACTS FOUND NOT TO BE SIGNIFICANT

The environmental process requires the Lead Agency for a proposed project, in this case the County of Los Angeles, to prepare an initial study (IS) checklist, which defines areas of environmental concern. The IS discussed what topics were going to be analyzed further in the EIR. The results of the IS for the proposed Lancaster Landfill Revised Conditional Use Permit project focused the topics that were going to be studied in the EIR down to only four topical areas: traffic and circulation, air quality, noise, and hydrology and water quality. A Notice of Preparation (NOP) was prepared describing the proposed project and summarizes the potential environmental impacts that could result from the implementation of a proposed project. Therefore, an Environmental Impact Report supplementing the previously certified EIR (i.e., EIR SCH No. 1993101036) has been prepared to assess certain potential impacts associated with this project. The IS, which was circulated with the Notice of Preparation (NOP), and the supporting documentation for the proposed Lancaster Landfill Revised Conditional Use Permit project are provided in Appendix A of this EIR.

This section summarizes those potential impacts of the proposed Lancaster Landfill Revised Conditional Use Permit that were previously discussed in the certified EIR and were determined in the IS to be below a level of significance or which could be mitigated to below a level of significance based on mitigation measures incorporated in the IS as well as mitigation measures prescribed in EIR SCH No. 1993101036, which has been incorporated as Appendix E.

5.1 Geotechnical

The project site is located in the seismically active southern California region. Primary ground rupture or fault rupture is defined as the surface displacement that occurs along the surface of a fault during an earthquake. There are no active faults or fault systems known to exist on or in the immediate vicinity of the project site. In addition, the project site is not within an Alquist-Priolo Earthquake Fault Zone as illustrated on the maps issued by the State Geologist for the area. Project implementation will not result in any physical changes (e.g., modify footprint and/or height of the landfill deck, etc.) to the approved landfill plan. Therefore, implementation of the proposed project is not anticipated to expose people or structures to fault rupture during a seismic event. No impacts will occur and no mitigation measures are required. The following mitigation measures will continue to be implemented, as prescribed in EIR SCH No. 1993101036.

- Prepare Earthquake Preparedness Plan as part of Emergency Response Plan.
- Design interim slopes not to exceed a gradient of 1.5:1.
- Develop landfill in phases to limit acreage disturbed during each phase.
- Construct peripheral drainage channels around the refuse prism.
- Continue implementation of dust control program.

5.2 Flood Hazard

Implementation of the proposed project (i.e., increase in daily capacity) will not affect or be affected by the existing or proposed hydrological conditions, which were evaluated in EIR SCH No. 1993101036. Based on that analysis, adequate storm drainage collection and conveyance facilities and flood control facilities have been identified and will be implemented to ensure that no significant flooding impacts will occur as are result

of the prior landfill expansion project. Mitigation measures that shall continue to be implemented pursuant to EIR SCH No. 1993101036 are identified below.

- In phases, construct diversion ditch around expansion area. Construct temporary ditches around each phase. Collect runoff in sedimentation ponds.
- Periodic inspections of surface drainage facilities, vegetated soil cover areas, intermediate fill surfaces and on-site access roads. Daily inspections during periods of high-intensity rainfall.
- Seal cracks caused by settlement in intermediate and final cover resulting from heavy rainfall.
- Design and construct earth-berms and channels to direct runoff away from site.
- Implement phasing plan to promote sheet flow to sedimentation basin for percolation and dust control.
- Implement Phase II drainage plan to promote sheet flow to the northwesterly detention basin. Implement Phase III drainage plan to direct flow to outer perimeter channel.
- In EEA, implement grading plan to direct flow to adjacent excavated cell and southerly channel. Pump water from excavated cells to designated sedimentation basins.
- Dedicate a 100-foot wide drainage easement along the east side of future 5th Street East for construction of a flood channel proposed in the Antelope Valley Flood Control and Water Conservation Plan.

5.3 Fire Hazard

The LLRC will continue to accept and process combustible waste. Potential impacts associated with fire and fire hazard at the LLRC were previously identified and required mitigation. The following measures for fire hazard prescribed in EIR SCH No. 1993101036 shall continue to be implemented.

- Implement measures described in Spill Countermeasure and Control Plan and Emergency Management Plan (required by State in CCR, Title 27) as listed on Pages 5.3-4 and 5.3-5 of Draft EIR.
- Maintain 100-foot wide buffer zone at the perimeter of the expansion areas.
- Implement procedures required by LA County Fire Department Prevention Regulation No. 10 to ensure adequate access and provision and maintenance of facilities.
- Train operations personnel annually in fire prevention, fire extinguisher use and emergency response.
- Remove debris and dust from undercarriages and engine compartments and check for oil and fuel leaks of landfill equipment and vehicles.
- Provide fire extinguishers on all landfill equipment and in the entrance and maintenance facilities.

5.4 Biota

As previously evaluated, the active landfill area is generally devoid of vegetation, although portions of the property support scrub vegetation and Joshua trees. The 1997 EIR prepared for the expansion of the LLRC evaluated the expansion-related impacts to biological resources, including those to the Joshua Tree Woodland habitat, wetlands, and other plant and wildlife species, that would result from continued use of the site as a sanitary landfill. That analysis concluded that although the (expansion) project could result in the loss of specific habitats of one or more sensitive wildlife species (e.g., Desert Tortoise and Mojave Ground Squirrel), they were/are not resident on the site. Nonetheless, mitigation measures have been previously imposed on the landfill expansion approved by the County as part of the 1997 EIR. Those measures address a range of biological resources that will not be affected by the proposed project. Similar measures (e.g., pre-construction surveys) were required in order to ensure that sensitive wildlife species are not present. No changes to the existing landfill footprint are proposed. Therefore, no direct or indirect impacts would occur to biological resources as a result of project implementation. Nonetheless, the mitigation measures prescribed in EIR SCH No. 1993101036 shall continue to be implemented.

- Revegetate completed landfill cells.
- Restrict size of working face of landfill to one acre or less to reduce attraction of unwanted species.
- Conduct pre-construction surveys to ensure that no sensitive plant species are found within project boundaries.
- Verify whether 0.4 acre desert meadow habitat in northern edge of EEA constitutes a jurisdictional wetland.
- Prior to construction activities in the EEA, perform a botanical survey to establish existing vegetation densities in order to develop revegetation seed mixes.
- Conduct timely surveys to determine the presence or absence of the desert tortoise. If found, coordinate with the CDFG and USFWS in implementing relocation program.

5.5 Cultural and Paleontological Resources

The site was extensively altered when the existing LLRC and ancillary facilities were constructed. A cultural resources reconnaissance was conducted on the subject property in 1994, which determined that no historic structures exist on the subject property and none exist within the vicinity of the site. As a result, implementation of development proposed by the applicant will not affect any existing historical resource in the County of Los Angeles. Further, no significant cultural or scientific resources are expected to be encountered on the subject site, which has undergone extensive alteration. As a result, no significant impacts to historic resources are anticipated and no mitigation measures are required. Nonetheless, the following mitigation measures prescribed in EIR SCH No. 1993101036 will continue to be implemented as applicable.

- Cease operations if cultural resources are encountered during any phase of construction. If Indian remains encountered, contact Native Indian Advisor of the local tribe as well as County Coroner.
- Retain qualified paleontologist to perform periodic inspections and, if necessary, salvage exposed fossils. The paleontologist shall be allowed to divert or direct grading in the area of an exposed fossil. As necessary, samples shall be collected with fine mesh screens. Implement other measures listed on Page 5.8-10 of Draft EIR.

5.6 Mineral Resources

The subject property is currently an operating Class III sanitary landfill. No mineral resources are known to exist on the site. Further, project implementation will not result in any physical changes to the site that have not previously been approved. Therefore, the proposed increase in the daily volume of refuse accepted at the landfill will not result in the loss of any locally important mineral resource recovery site. No significant impacts will occur as a result of project implementation.

5.7 Agricultural Resources

The site is not currently used for agricultural production and is not zoned or planned for such use. Project implementation will not result in the conversion of any prime or otherwise significant farmland. No agricultural use of the property presently occurs. Project implementation will not have any adverse effect on existing agricultural resources.

5.8 Visual Qualities

As previously indicated, with the exception of the increase in tonnage accepted each day at the LLRC, the landfill plan approved by the County and the Local Enforcement Agency will not change. No visual impacts would be associated with project implementation because no physical change (e.g., no increase in elevation of the final grades proposed for the LLRC) will occur to the final closure plan. The 1997 EIR thoroughly evaluates the potential visual impacts of the proposed LLRC Closure Plan and the proposed project is entirely consistent with that analysis. Nonetheless, the following mitigation measures prescribed in EIR SCH No. 1993101036 will continue to be implemented as applicable.

- Utilize berms, where practical, to screen views of working face of the landfill from nearby residential areas.
- Vegetate berms with intermediate vegetative cover.
- Coordinate with County of Los Angeles Department of Parks and Recreation and Antelope Valley Trails, Recreation and Environmental Council (AVTREC) to relocate rural trail currently proposed through the EEA.

5.9 Education

The proposed project does not include residential development or other development that would either directly or indirectly result in the generation of school-age children. Therefore, no significant impacts are anticipated as a result of project implementation.

5.10 Fire/Sheriff

The proposed increase in daily capacity at the LLRC will not have any significant effect on the level of law enforcement or fire protection service currently provided to the site or that anticipated in the future based on the nature of the land use. No mitigation measures are required for law enforcement.

5.11 Utilities

Implementation of the proposed project will not result in demands on utilities that are currently provided. No change in land use is proposed that would necessitate any change in the level of utilities would occur are a result of the proposed increase in daily refuse tonnage accepted at the LLRC. Therefore, no significant impacts are anticipated and no mitigation measures are required.

5.12 Environmental Safety

With the exception of household hazardous wastes, the LLRC does not accept hazardous waste. A hazardous waste exclusion program has been established at the landfill, which includes visual load inspections, background radiation monitor, a detailed training program pertaining to hazardous wastes, and an emergency response training program. The site is not listed on any of the hazardous materials sites compiled pursuant to Government Code Section 65962.5. The subject property is not located within the limits of a commercial airport land use plan or other public airport. Project implementation will not result in potential adverse impacts, including safety hazards, to people residing or working in the project area. Therefore, implementation of the project will not create a significant hazard to the public or the environment through the potential release of hazardous materials as a result of an accident. Nonetheless, the following mitigation measures prescribed in EIR SCH No. 1993101036 shall continue to be implemented.

- Continue to implement provisions of Special Waste Identification Plan (SWIP) to identify potential sources of hazardous wastes. Maintain signs that indicate that hazardous materials and liquid wastes are not accepted.
- Continue to implement Hazardous Waste Exclusion Program (HWEP) to randomly check loads of incoming waste for hazardous materials.
- Store materials in designated on-site storage area for less than 90 days. Materials to be removed by licensed transporter.
- Continue to utilize a radiation detector at the scale house to detect presence of radioactive materials and prevent their disposal at the site.

5.13 Land Use

The subject property is located in an area of the County of Los Angeles that is designated in the General Plan as Non-Urban, which can accommodate the existing landfill. No changes to that land use designation are proposed that would affect long-range plans and programs. Further, the subject property is not included within an area that is located with either a habitat conservation or natural community conservation planning area. Therefore, the project is consistent with all applicable plans.

5.14 Population/Housing/Housing/Recreation

The proposed development will not result in the elimination of any residential dwelling units or residents. Therefore, no existing housing or residents will be displaced if the project is approved and constructed and no significant impacts will occur. Further, project implementation does not include the development of the site for residential or other land uses that would be considered directly growth-inducing. The addition of three new employees will not adversely affect either the jobs/housing balance in the County of Los Angeles and, therefore, will be less than significant. No significant additional growth would be anticipated to occur as a direct result of the proposed increase in daily refuse volume accepted at the

LLRC. Therefore, no significant growth-inducing impacts are anticipated as a result of project implementation.

The subject property does not support recreational uses and would not result in the demand for any additional recreational uses. Therefore, project implementation will not adversely affect existing recreational facilities in the County of Los Angeles.

CHAPTER 6.0
UNAVOIDABLE ADVERSE IMPACTS

This Section summarizes the unavoidable adverse impacts associated with the proposed Conditional Use Permit and Solid Waste Facilities Permit for the Lancaster Landfill and Recycling Center. Specifically, Section 15126(b) of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR):

> "Describe any significant impacts, including those which can be mitigated, but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

Section 4.0 (Environmental Analysis) documents the analysis of the potentially significant adverse impacts associated with the Lancaster Landfill New Conditional Use Permit project. As discussed below, implementation of the proposed project is not anticipated to result in unavoidable significant project-related adverse impacts. All of the potentially significant project-related impacts identified in Chapter 4.0 of the Draft Supplemental EIR will be reduced to a less than significant level through the implementation of the prescribed mitigation measures. However, cumulative air quality impacts will remain significant as indicated below.

Impact 4.2-1 ***Project implementation will result in significant unavoidable NOx and PM10 emissions associated with on-site equipment, haul trucks, and commuter vehicles that exceed the significance thresholds for those pollutants.***

Impact 4.2-2 ***Although the other project-related emissions will be less than significant, the incremental contribution of daily emissions in the air basin, when combined with stationary and mobile-source emissions resulting from other approved and proposed projects in the air basin (refer to Cumulative Impacts, Chapter 9.0), which has been designated non-attainment for ozone and PM10, will exacerbate the existing unacceptable air quality in the air basin. Therefore, the cumulative impacts resulting from project implementation will be significant and unavoidable.***

CHAPTER 7.0
IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

Implementation of the proposed Conditional Use Permit that would increase the daily tonnage at the Lancaster Landfill by 1,300 tons per day, to 3,000 tons per day, will not require the commitment of any building materials such as sand, aggregate, concrete and asphalt since the nature of the projects is related to the increase in daily vehicular trips associated with the increased tonnage accepted on a daily basis at the landfill. There would be an irretrievable commitment of energy resources such as gasoline and diesel fuel for the operation of heavy trucks that would be utilized in the daily collection and transfer operations. Because these types of resources are available in sufficient quantities in this region and the proposed projects encompass a limited scope, these impacts are not considered significant.

The proposed project will not require the acquisition of additional property or the expansion of existing uses. The existing uses on the site are not proposed to be expanded. Although water use for dust suppression at the LLRC would increase from 60 to 120 acre feet of water annually, the increase is not significant. The consumption of other resources currently used at the site will not change. The proposed increase in daily tonnage that would be permitted by the approval of the new Conditional Use Permit and Revised Solid Waste Facilities Permit will not result in an adverse impact related to the commitment of resources in the immediate or distant future.

CHAPTER 7.0
IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

Implementation of the proposed Conditional Use Permit that would increase the daily tonnage at the Lancaster Landfill by 1,300 tons per day, to 3,000 tons per day, will not require the commitment of any building materials such as sand, aggregate, concrete and asphalt since the nature of the projects is related to the increase in daily vehicular trips associated with the increased tonnage accepted on a daily basis at the landfill. There would be an irretrievable commitment of energy resources such as gasoline and diesel fuel for the operation of heavy trucks that would be utilized in the daily collection and transfer operations. Because these types of resources are available in sufficient quantities in this region and the proposed projects encompass a limited scope, these impacts are not considered significant.

The proposed project will not require the acquisition of additional property or the expansion of existing uses. The existing uses on the site are not proposed to be expanded. Although water use for dust suppression at the LLRC would increase from 60 to 120 acre feet of water annually, the increase is not significant. The consumption of other resources currently used at the site will not change. The proposed increase in daily tonnage that would be permitted by the approval of the new Conditional Use Permit and Revised Solid Waste Facilities Permit will not result in an adverse impact related to the commitment of resources in the immediate or distant future.

CHAPTER 8.0
GROWTH-INDUCING IMPACTS

8.1 Definition of Growth-Inducing Impacts

Section 15126.2(d) of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe the potential growth inducing impacts of a proposed project. Specifically, Section 15126.2(d) states:

> "Discuss the ways in which the proposed project could foster economic development or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.... Also discuss the characteristics of some projects that may encourage and facilitate other activities that could substantially affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment."

Normally to assess whether the proposed project may foster spatial, economic or population growth, several questions are considered:

- Would the proposed increase in daily refuse tonnage accepted at the LLRC result in the removal of an impediment to growth such as the establishment of an essential public service or the provision of new access to an area?
- Would the proposed increase in daily refuse tonnage accepted at the LLRC result in economic expansion or growth such as changes in the revenue base or employment expansion?
- Would the proposed increase in daily refuse tonnage accepted at the LLRC result in the establishment of a precedent setting action such as an innovation, a radical change in zoning or a General Plan amendment approval?
- Would the proposed increase in daily refuse tonnage accepted at the LLRC result in development or encroachment in an isolated or adjacent area of open space, as opposed to an infill type of project in an area that is already largely developed?

8.2 Analysis of Growth-Inducing Impacts

Potential project-related growth-inducing impacts related to each of the questions cited above are discussed below.

> *Would the proposed increase in the daily refuse tonnage accepted at the LLRC result in the removal of an impediment to growth such as the establishment of an essential public service or the provision of new access to an area?*

The LLRC is an existing Class III sanitary landfill that has been in operation since the mid-1950s. Most recently, the County approved an expansion of the LLRC to include the additional fill areas, which provided for an increase in the capacity of the landfill. The growth-inducing impacts associated with that expansion were evaluated in an EIR (SCH No. 1993101036), which concluded that the LLRC was not considered "growth-inducing" because it is only a small part of the total solid waste disposal system that serves both existing and new development and other landfills in the County were closing and would close in the future. Rather than being considered growth-inducing, the expansion was identified and

determined to be one that was intended to meet the ongoing need for refuse and municipal solid waste disposal in the County and, in particular, in the Antelope Valley. In the same way, the revision to the Conditional Use Permit that would allow for an increase in the daily refuse accepted at the LLRC would also be considered "growth-accommodating" in that as the daily demand for landfill capacity continues, the ability to the LLRC to accept a greater volume will address that existing demand.

> *Would the proposed increase in daily refuse tonnage accepted at the LLRC result in economic expansion or growth such as changes in the revenue base or employment expansion?*

Implementation of the proposed project will not result in any significant economic growth or expansion in either the County of Los Angeles, nearby cities, or larger southern California region. Specifically, no significant employment will be created by the proposed project. The increase in the amount of refuse accepted on a daily basis at the landfill is intended to facilitate the daily demands for solid waste collection in the County. No significant increase in staffing is anticipated and no other uses are proposed that could stimulate unanticipated growth and development in the County of Los Angeles. Further, no residential development is proposed and none would be expected to occur as either a direct or indirect result of the proposed revision to the Conditional Use Permit for the LLRC. Therefore, no significant growth-inducing impacts of the proposed project are anticipated.

> *Would the proposed increase in daily refuse tonnage accepted at the LLRC result in the establishment of a precedent setting action such as an innovation, a radical change in zoning or a General Plan amendment approval?*

The proposed project does not necessitate any amendments to the County's General Plan. In the case of the proposed project, the proposed new Conditional Use Permit would allow for an increase in the amount of refuse that is currently permitted by the County (i.e., from 1,700 tpd to 3,000 tpd). No significant change to the existing use is proposed and, therefore, neither the General Plan nor the zoning adopted for the site would require revision. Therefore, approval of the Conditional Use Permit that allows for the increase in daily refuse accepted at the LLRC will not set a precedent in the use of the site.

> *Would the proposed increase in daily refuse tonnage accepted at the LLRC result in development or encroachment in an isolated or adjacent area of open space, as opposed to an infill type of project in an area that is already largely developed?*

Generally, growth-inducing projects possess such characteristics as being located in isolated, undeveloped or under developed areas, necessitating the extension of major infrastructure (e.g., sewer and water facilities, roadways, etc.) or those that could encourage the "premature" or unplanned growth in an area not planned for development (i.e., "leapfrog" development). The subject property is an existing Class III sanitary landfill. As such, it is important to note that the proposed increase in daily refuse intake at the LLRC will not remove an obstacle to population growth since the project site currently services and is anticipated to continue to serve an area that is urbanized. Further, the proposed project does not include expansion of the approved landfill footprint or other physical characteristics of the LLRC. Rather, it merely allows for an increase in the volume of refuse that can be accepted at the landfill on a daily basis. Therefore, no physical impacts outside the already approved landfill footprint will occur. These impacts have been evaluated in a prior environmental document (SCH No. 1993101036), which has been incorporated by reference. As indicated above, all of the essential infrastructure and related utilities have adequate capacity to accommodate the proposed increase in daily tonnage, which will not result in significant increases in demands on the infrastructure. Therefore, no significant growth-inducing impacts are anticipated

8.3 Conclusion

The answer to each of the questions cited above as they relate to the proposed new Conditional Use Permit for the LLRC is "no." The proposed project includes only the increase in the amount of daily refuse accepted at the landfill. As previously indicated, the LLRC is an established land use that is not characterized by features that attract or facilitate new, unanticipated development, which would ordinarily be considered growth inducing. Conventionally, growth inducement is measured by the potential of a project or a project's secondary effects (i.e. provision of new infrastructure which supports housing or creation of jobs) to facilitate development of housing. Since the proposed project only facilitates the efficient use of the landfill, the standard variables associated with the development of housing, commercial or industrial land uses do not apply very well. Further, all of the infrastructure that exists in the project area is adequate to provide an adequate level of service, including sewer, water, and storm drainage. As previously indicated, project implementation will not result in any significant direct or indirect addition of residential development that would generate new residents or employment that would be an "attractor" of residents to the area that are not already anticipated in the General Plan. The site is not located in an area that is constrained by the absence of infrastructure where the provision of infrastructure would promote further development. None of the accepted standards that distinguish growth-inducing projects characterize the proposed project; therefore, no significant growth-inducing impacts are anticipated as a result of project implementation.

SECTION 9.0
CUMULATIVE IMPACTS

9.1 Definition of Cumulative Impacts

Section 15355 of the CEQA Guidelines defines cumulative impacts as:

> ". . . two or more individual effects which when considered together, are considerable or which compound or increase other environmental impacts."

Section 15355 further describes potential cumulative impacts as:

> "(a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impacts from several projects are the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Cumulative impacts refer to two or more individual impacts which, when considered together, are considerable or which compound or increase other impacts. The individual effects may be changes resulting from a single project or from a number of projects. A cumulative impact refers to the degree of change in the environment resulting from a particular project, plus the incremental impacts created by other closely related past, present and reasonably foreseeable future projects. Cumulative impacts may reveal that relatively minor impacts associated with a particular project may contribute to more significant impacts when considered collectively with other projects taking place over a period of time.

9.2 Cumulative Impacts

Section 15130(b)(1) of the CEQA Guidelines provides two options for considering potentially significant cumulative adverse impacts. This analysis can be based on either:

"(A) A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted and certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency."

For the purposes of the cumulative impact analysis presented in this section of the Draft EIR, the assessment of cumulative air quality impacts considers a significantly larger area. Because air quality is affected by stationary and mobile-source emissions occurring within the region, development occurring within the Antelope Valley Air Quality Management District has been evaluated to determine the potential cumulative air quality impacts. However, traffic, noise and water quality impacts consider a smaller geographic area because the potential impacts are typically more localized. For this reason, the cumulative impacts analysis presented in this section for these issues considers only projects located within the immediate vicinity of the LLRC.

9.2.1 Antelope Valley Community Plan

The proposed project site is located within the area encompassed by the Antelope Valley Areawide Community Plan and is designated as "Non-Urban." Such areas generally are characterized by highly dispersed settlement or agricultural uses, which include public and semi-public uses typically in non-urban environs such as solid and liquid waste disposal sites, utility and communication installations, and schools and other public facilities necessary to serve non-urban populations. In addition, Edwards Air Force Base is located to the north, where no significant future development would be anticipated. Therefore, it is anticipated that future development in the immediate vicinity of the LLRC would be limited to low intensity uses permitted by the adopted N1 land use designation prescribed in the Antelope Valley Areawide Community Plan. Such development would not generate significant amounts of traffic and result in greater impacts than urban uses such as residential development. Therefore, use of the 3.8 percent annual growth factor that incorporated into the traffic analysis would certainly account for any potential cumulative impacts that would be anticipated from development occurring in the general (unincorporated) area surrounding the LLRC.

9.2.2 Lancaster General Plan

The LLRC is located north and east of the incorporated limits of the City of Lancaster. The nearest potential development areas within the City are located at least one to two miles to the south and west, where potential industrial and residential land uses are designated on the City's General Plan. As described in Section 9.2.3 below, a significant amount of development has been approved and is planned in the City, which will contribute to the overall cumulative impacts anticipated to occur in the region. In addition to these projects, the growth factor utilized in the traffic analysis (i.e., 3.8 percent per year) would account for any anticipated growth that may occur within the City of Lancaster.

9.2.3 Related Projects

The cumulative impacts analysis requires consideration of other projects causing related impacts in the project area as well as the region, and specifically the air basin, and in conjunction with the proposed project, to assess the potential for significant adverse cumulative impacts. Both the County of Los Angeles and City of Lancaster identified several projects that have been proposed within their respective jurisdictions; other projects have also been identified in the City of Palmdale. However, the vast majority of those development projects are not located within the vicinity or "area of influence" of the LLRC. As a result, the cumulative impact analysis that follows considers the list of projects identified in Table 9-1, in conjunction with an estimated annual growth rate that was applied to the traffic analysis to ensure that a "worst case" scenario was evaluated for the purpose of determining the potential cumulative environmental consequences of the proposed project.

Table 9-1

List of Cumulative Projects
Lancaster Landfill and Recycling Center

Project Name	Location	Status
City of Palmdale		
Airport Shuttle Facility	SE Corner of Avenue S and Guyon	Approved 8/21/2002
28 Single Family Lots	800 Feet s/o Barrel Springs Road (Between Aqueduct and Antelope Valley Highway)	Pending
Service Station/Mini-Mart	Sierra Highway between Pearblossom Highway and Antelope Valley Freeway	Pending
Highway Realignment	Avenue S, Antelope Valley	Pending
RV Storage/Lockers/Bait Store/Trap Store	600 East Avenue S	Pending
Expansion of Existing Outdoor Storage/Rental Yard	38853 North 8th Street East	Pending
Helistop-Palmdale Sheriff Station	Sierra Highway and Avenue Q	Approved 4/15/2004
City of Lancaster		
Renewal for Auto Dismantling Yard	46404 Division Street	Pending
16 Single Family Lots on 160 Acres	Between 30th Street and 35th Street West between Avenue A-8 and Avenue B	Pending
16 Single Family Lots on 81.9 acres	Southeast corner of Avenue E and 8th Street West near Lancaster	Pending
Other Landfill Projects		
Antelope Valley Landfill Expansion to 3,000 tpd	1200 West City Ranch Road, Palmdale	Pending

SOURCE: County of Los Angeles Department of Regional Planning

In addition to the projects identified above, the City of Lancaster has prepared a Development Summary Report, which reflects the status of planned and approved development in the City. This report also identifies building permit activity in Lancaster. According to the current report prepared by the City (January 2003 – April 2004), building permits were issued for 974 single-family residential dwelling units, approximately 285,000 square feet of commercial development (i.e., office/professional, retail and other), and 418,064 square feet of industrial development in 2003. Through April 2004, the Development Summary Report indicated that the City had issued building permits for 522 single- and multiple-family residential dwelling units and approximately 110,000 square feet of commercial development. The cumulative impact analysis associated with the developed identified in Table 9-1 and summarized above is presented below for the issues evaluated in the Draft Supplemental EIR.

9.2.4 Related Landfill Projects

In addition to the development projects, two landfill projects have also been proposed with approval pending in Los Angeles County (refer to Table 9-1). As discussed in Chapter 3.4 (Project Need), the County's existing landfill system is currently experiencing capacity problems associated with limitations that affect the capacities of several facilities. Similar to the proposed project, the Antelope Valley Landfill has requested a similar increase in daily capacity from the currently permitted daily capacity of 1,400 tpd to 3,000 tpd in an effort to accommodate the existing demand for landfill capacity. An amended CUP, which allowed the Puente Hills landfill to continue its landfill operations at 13,200 tpd, was approved on November 1, 2003. The amended CUP will allow the landfill to continue to operate until October 31, 2013, when the site will stop accepting waste for disposal. These landfills would also result in an increase in truck trips in the County and would contribute to the potential cumulative impacts associated with the development identified in Table 9-1 and elsewhere in the City of Lancaster and the larger Antelope Valley. In addition, both Sunshine Canyon Landfill and Chiquita Canyon Landfill have submitted plans for expansion. As previously indicated, Sunshine Canyon Landfill also received a permit to open and operate in the City of Los Angeles portion of the landfill up

to a maximum refuse infill rate of 5,500 tons per day, beginning in the summer of 2005. Additional permits are also being sought to combine and operate the facility as one large City/County landfill. Although an application to expand Chiquita Canyon Landfill has also been submitted, information on that proposed expansion is not available.

9.2.5 Cumulative Impact Analysis

Traffic and Circulation

Section 4.1 of the Draft Supplemental EIR evaluated the potential project-related and cumulative traffic impacts associated with the proposed new Conditional Use Permit for the LLRC. Based upon the scoping efforts undertaken with several responsible agencies (i.e., County of Los Angeles, City of Lancaster, and Caltrans), an annual growth factor of 3.8 percent was applied to the existing, 2005 traffic volumes at all key intersections and roadway segments within the study area to reflect future conditions. Inherent in the resulting future traffic forecasts are the additional trips generated by related projects anticipated to be completed by 2006. Therefore, the application of this annual growth factor provides for a conservative estimate of potential cumulative impacts, when compared against annual growth rates of one to two percent typically used in other areas of Southern California. It is important to note that none of the cumulative projects identified previously in the City of Lancaster or those in Palmdale or in unincorporated Los Angeles County are anticipated to generate a significant number of additional trips at either the study intersections because they are located beyond the area of influence of the LLRC and, specifically, the roadway segments and intersections evaluated for the proposed project as prescribed by the County of Los Angeles. As a result, the traffic resulting from the cumulative projects listed in Table 9-1 would utilize roadways and circulation facilities that would not be utilized by project-related traffic. over or beyond the traffic volume forecasts developed through the application of the annual growth rate applied at those same locations.

As indicated in the pavement analysis, the existing pavement design of three of the four segments (along Avenue F. Division Street, and 10th Street) currently exceeds the traffic index (TI). However, as indicated in Table 4.1-10, the project-related traffic is not expected to increase TI values from Year 2006 Cumulative Base conditions at any of the segments analyzed, with the exception of 10th Street between Avenue F and Avenue G under conditions with the project but without the Avenue F extension. Therefore, except for the 10th Street segment without the extension f Avenue F, the project would not cause any significant impacts on the pavement integrity of the four roadway segments.

Air Quality

A significant amount of development has been approved or is pending approval in the City of Lancaster (refer to Table 9-1 and related discussion of the cumulative projects). Although the increase in daily vehicular trips that will occur under the proposed project will not exceed the significance thresholds identified in Section 4.2-2, the daily incremental increase in vehicular trips generated by the proposed project, when combined with the mobile-source emissions generated by the vehicular traffic associated with the related projects, will result in significant cumulative air quality impacts. This is due, primarily, because the air basin is currently classified as "non attainment" for both ozone and particulate matter (i.e., PM10). The EIR prepared for the expansion of the LLRC in 1997 concluded that SCAQMD thresholds of significance are exceeded for NOx when considering cumulative projects. Hence, that expansion resulted in a significant unavoidable air quality impact for which the County adopted a Statement of Overriding Considerations. As indicated previously, implementation of the proposed project would generate significant amounts of NOx and PM10, on a project-specific basis; in addition, the increase in daily emissions will contribute to the regional burden. As a result, these emissions would exacerbate the current "non attainment" status of the basin for the two criteria pollutants (i.e., ozone, including NOx, ROG and PM10). Therefore, significant and unavoidable cumulative air quality impacts are anticipated within the air basin and the Los Angeles County Planning Commission must adopt a Statement of Overriding Considerations.

Impact 4.2-2 *Although the other project-related emissions will be less than significant, the incremental contribution of daily emissions in the air basin, when combined with stationary and mobile-source emissions resulting from other approved and proposed projects in the air basin (refer to Cumulative Impacts, Chapter 9.0), which has been designated non-attainment for ozone and PM10, will exacerbate the existing unacceptable air quality in the air basin*

Although the applicant will be required to comply with applicable AVAQMD rules and regulations as well as implement mitigation measures prescribed in EIR SCH No. 1993101036 (refer to Section 4.2.5), the cumulative air quality impacts associated with the proposed project will remain significant and unavoidable.

Noise

Similar to air quality, the potential cumulative noise impacts are based on increased traffic associated with the project and regional growth. As indicated in Section 4.3, with only one exception (Avenue H), all of the roadway noise levels are projected to be less than 65 dB CNEL along the nearest roadways that provide access to the LLRC. The most significant increase in the noise levels will result from traffic associated with other projects approved by the City of Lancaster and by the County of Los Angeles in the unincorporated Antelope Valley. It is unlikely that the truck traffic associated with the two landfill projects (i.e., Puente Hills Landfill and Antelope Valley Landfill) would utilize the roadways that would be affected by the LLRC given their geographic locations and, therefore, would not contribute to the overall noise impacts along those roadways. Further, aviation noise may be associated with the helistop in Palmdale; however, any potential impacts resulting from the operation of that facility would add incrementally to the ambient noise environment; however, due to the nature of the existing land use (i.e., landfill), no significant cumulative noise impacts would occur to the LLRC.

As indicated in Table 4.3-3, project-related vehicular noise will not add significantly to the projected noise levels forecast along Avenue F and Avenue G. The greatest increase in project-related noise would be 0.6 dBA along Avenue F (east of SR 14). However, as indicated previously, the noise levels do not exceed prescribed noise thresholds. Where mobile-source noise levels do exceed the 65 dBA CNEL criterion along Avenue H, east of SR-14, project-related traffic would contribute only 0.1 dBA (with or with the extension of Avenue F), which is generally not audible and, as a result, is not cumulatively significant. Therefore, no project-related cumulative impacts are anticipated as a result of the increased maximum daily capacity.

Water Quality

As indicated in Final EIR SCH No. 1993101036 for the 1997 LLRC Expansion, implementation of the measures prescribed for the landfill, including those required by regulatory agencies (e.g., BMPs for storm water runoff, etc.), would mitigate the potential ground water quality impacts associated with landfill development. With the exception of processing up to 3,000 tpd of refuse, compared to 1,700 tpd, none of the on-site conditions will change. Cumulative impacts to groundwater or surface water that may be anticipated to occur were identified and described in the EIR prepared for the LLRC Expansion. Any such impacts identified that are the result of existing landfill operations are addressed through on-site systems, including the leachate collection and recovery system, which are in place to ensure that groundwater is not adversely affected. As a result, potential cumulative impacts to both groundwater and surface water quality will be avoided through the design of the landfill, which complies with all regulatory requirements for such facilities. Finally, the landfill relies on two deep wells that provide groundwater for dust suppressions during daily landfill operations. There is no reliance on domestic water provided by either the City or County of Los Angeles. Although the amount of water necessary to accommodate landfill operations on a daily basis will increase, the total amount of groundwater necessary to provide dust suppression and related functions in support of landfill activities will not change significantly over the life of the landfill. An incremental increase of 60 to 120 acre feet of water for dust suppression will be required to accommodate the increased landfill operations; however, the small increase in the demand for water supplies, when compared to the related project identified in Table 9-1, will not be cumulatively significant. Adequate supplies of the well water are available and no significant cumulative impacts associated with the use of well water for dust suppression is

anticipated. Similarly, there will be no cumulatively significant water quality impacts as a result of the proposed project.

CHAPTER 10.0
PROJECT ALTERNATIVES

10.1 Introduction

10.1.1 Purpose and Scope

CEQA requires that an EIR describe a range of alternatives to the project, or to the location of the project, which could feasibly attain most of the basic objectives of the project while avoiding or reducing otherwise significant adverse impacts of the project. This chapter sets forth potential alternatives to the proposed project and evaluates them as required by CEQA.

Section 15126(d)(2) directs that an EIR should focus on alternatives capable of either: (1) eliminating any significant adverse environmental effects of a proposed project; or (2) reducing potential adverse effects to a level of insignificance. The discussion of alternatives in this Draft EIR reviews a range of alternatives that satisfies this requirement.

This Section analyzes several potentially feasible alternatives to the proposed project, including:

- No Project/No Development (Existing Landfill Operations)
- Smaller Increase in Daily Permitted Capacity (2,350 tpd)
- Increase in Daily Maximum Capacity at Antelope Valley Landfill

10.1.2 Evaluation of Project Alternatives

According to the CEQA Guidelines, an EIR must "(d)escribe a range of reasonable alternatives for the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The Guidelines go on to indicate that alternatives "which are capable of substantially lessening any significant effects of the Project" must be examined "even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly." The Guidelines further indicate that "the EIR need examine in detail only the [alternatives] that the lead agency determines could feasibly attain most of the basic objectives of the project." (CEQA Guidelines Section 15126(d)). Thus the ability of an alternative to attain most of the basic project objectives is central to the consideration of alternatives to the proposed project.

For each alternative, the analysis presented in this section:

- Describes the alternative;
- Discusses the impacts of the alternative and evaluates the significance of those impacts; and,
- Evaluates the alternative relative to proposed project, specifically addressing project objectives, feasibility, the elimination or reduction of potentially significant impacts.

10.1.3 Identification of Impacts

After describing the alternative, this EIR evaluates the impacts of the alternative. The major resource areas included in the detailed impact analysis in Section 4.0 are included in this section. The potential environmental consequences are identified and described in the analysis for each of the alternatives identified in Section 10.1.1. These significant impacts must be mitigated by the County, regardless of whether the County implements the proposed project or one of the alternatives.

10.2 Environmentally Superior Alternative

The No Project Alternative (i.e., "status quo" or existing permitted capacity) is determined to be the "environmentally superior" alternative. However, as prescribed in the State CEQA Guidelines (refer to Section 15126.6[e][2]), the EIR must also identify an environmentally superior alternative among the other alternatives that were analyzed in the event that the No Project Alternative is identified as "environmentally superior." Therefore, the environmentally superior alternative is the Reduced Increase in Daily Permitted Capacity alternative. Although no significant, unavoidable adverse impacts were identified as a result of project implementation, the reduction in truck trips that would result from the Reduced Increase in Daily Permitted Capacity alternative (i.e., approximately 100 trips per day compared to a maximum of 128 trips per day for the proposed project) would not only reduce the degree of the (less than significant) project-related impacts but also achieve most of the project objectives.

10.3 Analysis of Alternatives

At the present time, the County's daily permitted capacity, including waste-to-energy facilities, is limited to less than 50,000 tons. As previously discussed in Chapter 3.0 of this document, Los Angeles County allows individual jurisdictions to dispose their waste at any facility, including exporting waste out-of-County, at their discretion. Growth that has taken place in southern California has continued to create a demand for landfill capacity. Without additional landfill capacity to accommodate the continuing growth and development in the region, the County may face a serious shortage of capacity. Based on 2002 waste generation, the County has a little over 8 years of capacity. Even with heavy reliance on waste export, the County cannot show 15 years of capacity as required by AB 939.

While the proposed project does not increase the total capacity of the landfill (i.e., the horizontal "footprint" would not change as a result of project implementation), it does allow for an increase in the daily volume of refuse that can be accepted at the LLRC. However, as indicated in Chapter 3.0, the life of the LLRC would be reduced from 26 years based on the daily intake of 1,700 tpd to 15 years as a result of the increase in daily tonnage (i.e., 3,000 tpd). Although this increase in the daily capacity can temporarily offset the anticipated shortage of landfill capacity on a daily basis, it will be necessary for the County to take steps to increase the long-term capacity of the facilities within its landfill system. The alternatives that are evaluated in the Draft EIR are specifically intended to achieve the objectives of the proposed project, which include:

- Significantly increase daily refuse handling capacity at an existing in-county landfill to accommodate future projected population growth and waste load shifting within Los Angeles County.
- Provide a regional resource within the Lancaster area that is available for both local and County waste disposal for at least 15 years.
- Decrease the amount of dependence on out-of-county waste disposal and long-haul options of waste by increasing in-county disposal options, and thereby avoiding adverse regional air quality and traffic impacts.
- Minimize the impacts of solid waste disposal through a well-engineered and environmentally sound operation.
- Dispose of refuse in an existing landfill and relatively isolated area thus efficiently utilizing land space.

10.3.1 Alternatives Previously Evaluated (1997 LLRC Expansion EIR)

The 1997 EIR prepared for the LLRC Expansion project evaluated several alternatives (to the expansion). In addition to the No Project (i.e., no expansion) alternative, the 1997 EIR evaluated both onsite and off-site locations for increasing the potential landfill capacity proposed by the expansion. The characteristics and impacts of the analysis presented in that EIR are summarized below. Chapter 7.0 of the 1997 EIR is incorporated by reference.

Rail Haul to Remote Locations in and out of California

Although rail haul of waste to remote locations appears to be a viable component of an overall integrated waste management system, it is dependent on securing capacity at those remote locations through long-term agreements. In addition, rail haul to those sites evaluated in the 1997 EIR (e.g., Eagle Mountain in Riverside County, Mesquite Regional Landfill in Imperial County, East Carbon Sanitary Landfill in eastern Utah, etc.) indicated that municipal solid wastes from the Antelope Valley would necessitate processing through a materials recovery facility (MRF); such facilities do not exist in the Antelope Valley with rail haul capabilities and no rail lines currently exist that currently connect the Antelope Valley with those remote locations. While it seems likely that one or more rail haul projects will eventually be permitted and constructed in Southern California, as indicated in EIR SCH No. 1993101036, rail haul from the Antelope Valley is neither logistically nor economically feasible due to two factors: logistics and economics. There are currently no existing or planned MRF and/or transfer facilities and direct rail connections to not exist from the disposal sites to the remote facilities. As a result, in infrastructure costs associated with the development of transfer stations and related rail facilities would outweigh the economic benefit created by the waste stream. Further, tipping fees for long-haul rail system were not competitive with other out-of-county locations (e.g., County of Orange). Even if this alternative were feasible, it would result in the surrender of local control over out of county host fees and taxes. Finally, significant environmental issues have been identified for such alternatives, including air quality impacts, as well as health and safety issues, impacts to biological resources and other environmental issues.

Expansions of Other Existing Landfills in Los Angeles County

The 1997 EIR also evaluated the potential consequences of expanding other landfills in the County. Specifically, the Chiquita Canyon Landfill expansion was evaluated as well as a new landfill site in the City of Santa Clarita (Elsmere Canyon Landfill). It was determined that the expansion of the existing landfill and that identified as a potential landfill site in the City of Santa Clarita would not reduce any of the project-related impacts. In fact, implementation of either of those alternatives would result in more significant impacts, including noise, traffic, air quality, and, in the case of the undeveloped site as well as potential impacts to cultural and scientific resources, biological resources, etc. In addition, both sites are located at least 45 miles, which not only exacerbate potential environmental impacts but also result in higher tipping fees.

Other alternatives evaluated in the 1997 EIR addressed modifications to the expansion of the LLRC proposed at that time. Although both of these alternatives reduced potential impacts commensurate with the level of their respective expansion areas, neither achieved the important objective of expanding the long-term waste disposal capacity at the LLRC and did not provide for in-County daily capacity options and long-term disposal.

Since that time, the existing landfills in the County have been accepting refuse on a daily basis at an increasing rate as a result of the increased growth. As indicated previously in Chapter 3.0 (refer to Table 3-7), although the 55,130 tons of permitted daily capacity for the current in-County waste disposal system exceeds the average of 29,675 tpd of waste generated for disposal in-County in 2004, the permitted daily capacity does not reflect actual site specific limitations (e.g., wasteshed restrictions, facility design

limitations, limited remaining capacity, waste stream restrictions, and geographic locations). The "effective" inflow rate for Los Angeles County landfills, based on existing limitations, is estimated to be only 41,272 tpd. Based on the reported tonnage disposed for 2004 in Los Angeles County landfills of 29,675 tpd, the County currently has a daily refuse capacity surplus of approximately 11,600 tpd. However, without additional landfill capacity, future demands created by pending landfill closures and continued growth and development within the region may not be met. Closure of the Bradley and Puente Hills Landfills alone will reduce the "effective" daily disposal capacity within the County to less than 28,000 tpd by 2013 (versus the 29,675 tpd 2004 in-County need from Table 3-7). In addition, the ability to continue current exports to Orange County may expire by 2015, which will place another 2,500 tpd into the Los Angeles County disposal system. As a result, the alternatives presented in this document focus on increasing the short-term, daily capacity to meet existing landfill space demands.

10.3.2 No Project/No Development (Existing Landfill Operations)

The No Project Alternative assumes the continuation of "status quo" of the existing permitted levels of operation and conditions at the LLRC. Specifically, this alternative assumes that the existing permit would remain in effect and the LLRC would continue to operate at the 1,700 tpd permit level. Based on the continuation of the maximum permitted rate of disposal (i.e., 1,700 tpd), the LLRC has a remaining life of approximately 26 years (i.e., 2030), based on the current permit for waste intake.

Traffic and Circulation

The No Project Alternative will not result in the generation of any additional vehicular traffic compared to the proposed project. The site currently generates approximately 400 trips per day (based on 1,700 trips per day), which is less than the proposed project. As indicated in Section 4.1, all of the intersection currently operate at LOS A and are forecast to operate at LOS A in the future with the proposed project (including cumulative growth). Because there would not be an increase in daily trip generation associated with the No Project alternative, the contribution of this alternative's traffic to the surrounding circulation system would be less than that associated with the proposed project. As a result, there would be no change in the intersection operations levels of service (i.e., each of the intersections would operate at acceptable levels of service). Nonetheless, traffic resulting from this alternative would be less than the project-related traffic. It is important to note that the traffic associated with the No Project alternative will continue to have an effect on the pavement integrity of Division Street (between Avenue F and Avenue G), and Avenue F (between Division Street and 10th Street East), which were identified in the EIR prepared for the LLRC Expansion project in 1997.

Air Quality

Without any increase in the daily tonnage accepted at the LLRC, no direct increase in air quality emissions would occur. As indicated in Section 4.2, the air emissions currently generated as a result of on-site activities and vehicular traffic would continue to occur; these existing emissions do not currently exceed the established significance thresholds. Although the increases resulting from project implementation would not exceed the significance thresholds, the No Project emissions would be less than those associated with project implementation. However, it is important to understand that some indirect air emissions associated with the No Project alternatives may occur. In the event it becomes necessary to redirect refuse vehicles to another County landfill (in the event materials recover facilities and/or transfer stations are not available for use in the disposal process) because the 1,700 tpd capacity has been reached at the LLRC, trip lengths associated with the redirected refuse truck traffic may increase, depending on which landfill the trucks would be sent. Although it is difficult to quantify the actual air emissions, it may be anticipated that increases in air emissions would occur if the trip length exceeds the current trip length within the LLRC wasteshed. Depending on how much traffic may be diverted to another landfill and the distance to that landfill beyond the distance to the LLRC, the potential impacts may be significant, either on a project or cumulative basis.

Noise

No significant noise impacts would result from the implementation of the No Project Alternative. Ambient noise levels along the surrounding roadways range from approximately 58 dBA CNEL to less than 67 dBA CNEL. These levels are forecast to increase only slightly (i.e., less than 0.5 dBA CNEL) without the project-related traffic (i.e., existing traffic, including the existing landfill traffic) and cumulative growth-related traffic. Therefore, continuation of the current operations without an increase in daily tonnage at the LLRC will not result in any significant noise impacts.

Water Quality and Drainage

Implementation of the No Project alternative will not have any significant impacts on the water quality and drainage. These impacts were thoroughly evaluated in the EIR prepared for the expansion of the LLRC that was approved in 1998. The increase in the daily capacity from 1,700 tpd to 3,000 tpd will not change any of the physical characteristics associated with the approved landfill. These impacts will be virtually the same as identified for the proposed project (refer to Section 4.4).

- Ability to Achieve Project Objectives

  Although the No Project alternative does meet several of the objectives of the project applicant, including recycling of materials, efficient disposal of refuse available in the local area, etc., it does not meet the specific object of allowing for an increase in daily refuse handling in an effort of meeting projected population increases in the County and decreasing disposal facilities.

- Elimination/Reduction of Significant Impacts

  Implementation of the No Project alternative would result in no change in the number of daily trips associated with the existing 1,700-tpd capacity approved for the LLRC. As a result, there would be no change in traffic, air emissions and noise impacts associated with this alternative, which would be slightly less than for the proposed project. As previously indicated, it is important to note that some indirect impacts to traffic, noise and air quality may occur in the event that refuse that would normally be directed to the LLRC is diverted to another landfill in the region because the facility reaches its currently permitted daily capacity (assuming that MRF and/or transfer facilities are not available for use in the disposal system). Although the potential impacts of this alternative will be the same as presently occurs as a result of current operations at the LLRC, the No Project alternative would not result in the elimination or significant reduction of significant impacts when compared to the proposed project.

- Feasibility

  While this alternative is feasible, the current limited availability of daily (and long-term) capacity in the County's landfill system is a limiting factor when considering the County's responsibility of providing adequate landfill capacity. Implementation of the No Project alternative will result in the continuation of the status quo.

10.3.3 Smaller Increase in Daily Permitted Capacity (2,350 tpd)

This alternative would be similar in nature to the proposed project; however, this alternative (and SWFP) would allow for an increase in daily permitted capacity of only 2,350 tpd, compared to 3,000 tpd for the proposed project. This increase represents approximately one-half of that requested by the project applicant. This alternative, like the proposed project, would result in an increase in the permitted daily capacity, which would require a revision to both the Conditional Use Permit and the Solid Waste Facilities Permit approved for the LLRC. The effect of this alternative would be the reduction in the remaining life of the LLRC from the currently estimated 26 years to approximately 21 years; however, like the proposed

project, this reduced daily capacity increase would increase the total daily capacity available within the County's landfill system and facilitate short-term demands for sanitary landfill capacity. With the exception of traffic, noise and air quality impacts, implementation of the reduced increase alternative would not result in any impacts that were not previously evaluated in the EIR prepared for the LLRC Expansion. The potential impacts associated with traffic, noise and air quality are identified and described below.

Traffic and Circulation

Implementation of the reduced increase in daily capacity alternative would result in fewer heavy truck trips when compared to the proposed project. Based on the maximum daily capacity of 2,350 tpd and similar trips as identified for the proposed project, this alternative would result in the generation of approximately 64 additional daily PCE trips (i.e., an increase of approximately 13 heavy truck trips per day). As described for the proposed project, all of the key study intersections are currently operating at acceptable levels of service (i.e., LOS A) and are forecast to continue to do so when project-related traffic and future growth is added to the circulation system. As a result, the addition of fewer vehicular trips will result in the contribution of fewer vehicles to the roadways in the vicinity of the project site. Because no significant project-related impacts were identified, none of the intersections would be adversely affected by the traffic generated by this alternative and no mitigation measures would be required. However, as indicated for the proposed project, the pavement integrity of three roadway segments would be affected by additional heavy truck traffic generated by the LLRC. The increase of 245 trips per day associated with this alternative would result in the same impacts over time to the pavement integrity of the same three roadway segments, including Avenue F (between Division Street and 10th Street East), Division Street (Between Avenue F and Avenue G), and 10th Street East (between Avenue F and Avenue G). As a result, implementation of this alternative would be subject to the same mitigation as the proposed project (i.e., payment of fair share/pro-rata fees).

Air Quality

Air quality impacts resulting from this alternative are anticipated to be less than the air quality emissions associated with the proposed project because there would be a decrease in the daily trips. Therefore, this alternative would generate only about 64 additional daily trips (i.e., PCE trips), resulting in approximately one half of the mobile-source pollutant emissions identified for the proposed project. In addition, a proportional decrease in the on-site emissions, primarily fugitive dust, would also result based on a reduced level of landfilling operations that would occur from the reduced activities when compared to the proposed project. However, as indicated in Section 4.2, the increase in project-related daily air emissions, including both vehicular and on-site "construction" emissions, are not significant because they do not exceed the thresholds established by the local air pollution control district. Like the proposed project, these direct air quality impacts would contribute to the cumulative degradation of the Mojave Desert Air Basin and would be, like the proposed project, significant on a cumulative basis.

Noise

Similar to the air quality impacts described above for this project, noise impacts are directly related to the movement of heavy trucks to and from the LLRC and earth-moving equipment occurring on the site. Implementation of the proposed project would result in an increase only 0.3 dBA CNEL. Further, the projected noise levels along all but one of the key roadways analyzed in the traffic study would be characterized by noise levels that are less than 65 dBA CNEL with the proposed project (and cumulative growth). The noise levels along Avenue H east of SR-14 would operate slightly above the 65 dBA CNEL criterion; however, as indicated above, project-related trips would not generate noise increases that can be perceived (i.e., 0.1 dBA with or without the Avenue F extension). Therefore, no significant noise impacts were identified for the proposed project. Because this alternative would result in fewer trips, the noise impacts associated with it would be the same or proportionately less than the proposed project. Operational noise impacts (i.e., noise resulting from landfill activities associated with landfill operations) would be the same as for the existing LLRC (i.e., No Project alternative) and for the proposed project. A reduction in the

maximum daily capacity from that proposed would also be the same as current ambient operational noise levels.

Water Quality and Drainage

Implementation of this alternative will have, in general, similar impacts on the water quality and drainage as identified for the proposed project. These impacts were thoroughly evaluated in Section 4.4 of the Draft SEIR As indicated in that assessment, no significant impacts from changes in the topographic conditions are anticipated because waste will be placed above lined areas and there would be no potential increase in erosion beyond that identified in the prior EIR.

- Ability to Achieve Project Objectives

This alternative, which would allow an approximately 38 percent increase in the maximum daily capacity of the LLRC, would achieve most of the objectives articulated. Although the increase in daily capacity would accommodate some of the increased daily demand for refuse capacity in the County's landfill system, the additional capacity resulting from this alternative would not be as great as proposed. Therefore, although the existing need for additional short-term (i.e., daily) capacity will be offset, the County will continue to experience demands for refuse capacity resulting from continued growth.

- Elimination/Reduction of Significant Impacts

While this alternative would reduce the number of vehicular trips when compared to the proposed project, the impacts of the proposed project are less than significant. Nonetheless, the reduction in traffic associated with this alternative will result in a concomitant reduction in air pollutant emissions and the generation of mobile-source noise. Because of the significant number of projects that have been approved in the Antelope Valley and, further, because the LLRC is located within a "non-attainment" air basin, the significant cumulative air quality impacts resulting from project implementation would not be eliminated by this alternative.

- Feasibility

The reduced Increase in Daily Capacity at the LLRC is feasible and can be implemented by the project applicant in the same manner as the proposed project. However, as indicated above, the amount of additional daily capacity, which is becoming increasingly reduced in the County's system, would be less than the proposed project. In addition, this alternative would have limitations on its ability to generate additional revenue from tipping fees.

10.3.4 Increase Daily Maximum Capacity at Antelope Valley Landfill

This Alternative would involve a similar action (i.e., increase the existing maximum daily capacity) at the Antelope Valley Landfill (or another landfill within the County's landfill system) located in the City of Palmdale. This facility, also owned and operated by WMI, is approximately 15 miles from the LLRC. The maximum daily capacity approved for the Antelope Valley Landfill (AVL) in the SWFP is 1,400 tpd. An application to increase the daily capacity to 3,600 tpd (from the approved 1,400 tpd daily capacity) has been filed with the City of Palmdale. This alternative (i.e., increase in daily maximum capacity at the Antelope Valley Landfill) would result in an even greater increase in daily capacity than that currently proposed in order to accommodate the 1,300-tpd increase proposed at the LLRC. In order to accommodate the proposed increase in daily capacity at the AVL, the SWFP and related approvals (CUP) would be modified to permit a maximum daily capacity of 4,900 tpd. This alternative, combined with the proposed project, would increase the daily capacity available within the County-wide landfill system to offset the current deficit in daily capacity that exists (refer to the discussion presented in Section 3.4).

Implementation of this alternative could result in a transfer of the potential impacts identified for the proposed project from the project environs to the vicinity of the Antelope Valley Landfill in Palmdale. These impacts are identified below.

Traffic

It is anticipated that the vehicular trips generated by this alternative would be virtually the same as identified for the proposed project. As indicated in Section 4.1, the proposed project would result in the generation of 128 daily PCE trips (i.e., 54 two-way heavy truck trips), including 32 trips during the a.m. peak hour and 29 trips during the p.m. peak hour. The increase in daily capacity associated with this alternative would result in an additional 59 daily heavy truck trips (i.e., 236 daily PCE trips). Depending on the existing roadway and intersection volumes in the vicinity of the Antelope Valley Landfill, implementation of this alternative, which would generate at least 59 additional transfer trailer trips per day, could be potentially significant if the existing roadway and intersection operating conditions exceed the level of service standards adopted by the City and/or County. However, if the roadway segments and intersections are operating at acceptable levels of service, the addition of only 236 PCE trips per day and respective peak hour trips would not result in potentially significant impacts.

Air Quality

Although the mobile source air emissions would occur within the same air basin (i.e., Mojave Desert Air Basin), it is possible that air quality impacts may be less than those resulting from the implementation of the proposed project because the average trip length may be less than the trip length associated with the proposed project. Because the AVL is closer to the source of refuse in the area, the trip length would be reduced when compared to the proposed project. As a result, mobile-source air emissions associated with this alternative would potentially be less than identified for the LLRC project. Although the potential project-related impacts of this alternative would be less than significant, similar to the proposed project, the incremental increase in both CO and NOx emissions would contribute to the cumulative degradation of the air basins because it is designated as a non-attainment area. LFG emissions would be similar to those estimated for the proposed project.

Noise

Similar to traffic impacts identified, implementation of this alternative could result in potentially significant noise impacts if the ambient and/or future noise levels in the vicinity of the landfill exceed significance thresholds or if sensitive receptors are located in proximity to the landfill that would be affected by the increase in noise resulting from the heavy truck traffic. Residential development does exist closer to the Antelope Valley Landfill. As a result, if either an increase in operational activities or heavy truck traffic occurs as a result of this project that would increase noise levels, potentially significant impacts could occur to the nearby residential land uses. If so, these potential impacts would be greater than those associated with the proposed project.

Water Quality and Drainage

It is anticipated that hydrology and water quality impacts associated with this alternative would not be significant. Similar to the proposed project, the Antelope Valley Landfill has been designed to accommodate storm runoff and control leachate generated by the deposition of refuse. Although the amount of refuse deposited at the Antelope Valley Landfill would increase on a daily basis, it would not change any of the surface hydrology and/or groundwater parameters reflected on the Landfill Plan. The surface hydrology and leachate control systems would be implemented earlier than previously identified and the landfill would be closed sooner that anticipated as a result of the increase in daily capacity that would be permitted.

- Ability to Achieve Project Objectives

It is anticipated that implementation of this alternative could achieve most of the objectives of the proposed project, including increasing the maximum daily capacity in the County-wide landfill system and potentially reducing the volume of refuse that is exported from Los Angeles County.

- Elimination/Reduction of Significant Impacts

Implementation of this alternative could result in the same or new potentially significant impacts, depending on the ambient conditions related to traffic and noise. If the roadway segments and intersections in the vicinity of the Antelope Valley exceed or are forecast to exceed adequate levels of service, potential traffic impacts could occur. Also, increased trip lengths would result in a greater amount of pollutant emissions. Finally, it is possible that noise impacts could occur if ambient or forecast noise levels exceed significance thresholds.

- Feasibility

The feasibility of implementing this alternative would be similar to that of the proposed project. It would necessitate the approval of a new Conditional Use Permit by the City of Palmdale and Solid Waste Facilities Permit by the Local Enforcement Agency. This alternative would not avoid or substantially reduce otherwise significant impacts, however.

10.4 Summary of Project Objectives

The proposed increase in maximum daily capacity at the LLRC is needed for more efficient and effective operations at the LLRC and within the County's landfill system. The proposed project objectives are as follows:

1. Significantly increase daily refuse handling capacity at an existing in-county landfill to accommodate future projected population growth and waste load shifting within Los Angeles County.
2. Provide a regional resource within the Lancaster area that is available for both local and County waste disposal for at least 15 years.
3. Decrease the amount of dependence on out-of-county waste disposal and long-haul options of waste by increasing in-county disposal options, and thereby avoiding adverse regional air quality and traffic impacts.
4. Minimize the impacts of solid waste disposal through a well-engineered and environmentally sound operation.
5. Dispose of refuse in an existing landfill and relatively isolated area thus efficiently utilizing land space.

The Table 10-1 summarizes the ability for each Alternative and the proposed project to meet the stated project objectives of the proposed project.

Table 10-1

Project Alternatives Objectives Attainment
Lancaster Landfill Conditional Use Permit

Objective	Does Alternative Meet Objective?		
	No Project	2,350 tpd Capacity	Antelope Valley LF
Increase daily refuse handling capacity to handle projected population growth and waste load shifting within Los Angeles County.	No	Yes	Yes
Recycling and beneficial use of materials.	Yes	Yes	Yes
Provide a regional resource within the Lancaster area that is available for local waste generation as well as Los Angeles County overall.	Yes	Yes	Yes
Minimize the negative impacts of solid waste disposal through a well engineered and environmentally sound operation.	Yes	Yes	Yes
Disposal of refuse in a relatively isolated area that efficiently utilizes land space and natural topography.	Yes	Yes	Yes
Decrease the amount of out-of-County disposal and long-haul options of waste, thereby negating additional adverse impacts on regional traffic and air quality.	No	Yes	Yes

10.5 Summary of Environmental Impacts

An EIR is required to identify the "environmentally superior" alternative among those evaluated from the reasonable range of alternative analyzed. Section 15126.6(e)(2) of the State CEQA Guidelines mandates that in the event ". . . the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Table 10-2 provides a comparison of the potential project-related impacts associated with each alternative. As indicated in that table, the No Project Alternative may be considered the environmentally superior alternative unless continued growth within the County creates demands for landfill capacity (on a daily basis) that requires the County to export greater volumes of refuse. However, in the event additional daily capacity is not available, potential impacts associated with the No Project alternative could be greater than those identified for the proposed project as a result of increased trip length in the event MRF and/or transfer stations cannot be integrated into the disposal process (which could reduced the average trip length). In particular, air quality impacts could be significant as a result of greater trip lengths associated with the export operations.

Table 10-2

Summary of Impacts - Project Alternatives
Lancaster Landfill Conditional Use Permit

Alternative	Reduced Impacts	Impacts Avoided or Reduced	Additional Impacts	Environmentally Superior	Meets Project Objectives
No Project/ No Increase in Daily Capacity	Yes[1]	Air Quality Noise Traffic	No[2]	Yes	Some
Reduced Increase in Daily Capacity (2,350 tpd)	Yes	Noise Traffic	No	Yes	All
Increase in Daily Permitted Capacity at Alternative Site (Antelope Valley Landfill)	No	No	Air Quality[3] Noise[3] Traffic[3]	No	All

[1]Reduced impacts are based on no additional volumes of refuse exported to out-of-county landfills.
[2]Traffic, noise and air quality impacts associated with the No Project alternative could be greater if more refuse from the wasteshed is exported to out-of-county landfills.
[3]Potential traffic, noise and air quality impacts could be greater when compared to the proposed project, depending on the ambient conditions in the vicinity of the Antelope Valley Landfill.

As indicated in Section 10.3.2, the No Project (no increase in daily capacity) alternative is considered the environmentally superior alternative. However, implementation of the Reduced Increase in the Daily Permitted Capacity alternative may be identified as the "environmentally superior" alternative when compared to the proposed project and other alternatives evaluated because although the potential impacts would be the same as identified for the proposed project, they would be less (e.g., traffic, noise and air quality). As summarized in Table 10-1 and the preceding analysis, the Reduced Increase in the Daily Permitted Capacity alternative is able to achieve all of the project objectives.

CHAPTER 11.0
ORGANIZATIONS AND PERSONS CONSULTED

County of Los Angeles

Daryl Koutnik, Department of Regional Planning (Impact Analysis Section)
Karen Simmons, Department of Regional Planning (Zoning Permits Section)
Christina D. Tran, Department of Regional Planning (Impact Analysis Section)
Nickolas Vangunst, Department of Public Works (Traffic and Lighting Division)
Lani Alfonso, Department of Public Works (Traffic and Lighting Division)
Carmen V. Sainz, Department of Regional Planning

Bryan A. Stirrat & Associates, Inc.

John Boucher, Vice President, Regulatory Compliance Services
Christine Arbogast, Vice President, Solid Waste Services
Paul Willman, Senior Project Manager

Linscott, Law & Greenspan Engineers, Inc.

Trissa De Jesus Allen
Shane Green
Keil Mayberry

Keeton Kreitzer Consulting

Keeton Kreitzer, Principal

Giroux & Associates

Hans Giroux

Environmental Compliance Solutions, Inc.

Erin M. Sheehy, R.E.A., President

Waste Management of California, Inc.

John Workman, Western Group Engineer
Mike Williams

Remy, Thomas, Moose and Manley, LLP

Andrea K. Leisy

CHAPTER 12.0
REFERENCES

The following references were used in this preparation of the Supplemental Environmental Impact Report (SEIR) for the proposed Conditional Use Permit for the Lancaster Landfill.

SCS Engineers; "Semi-Annual/Annual Groundwater Monitoring Report for the Period Ending December 31, 2003;" Lancaster Landfill and Recycling Center; January 2004.

County of Los Angeles, Department of Regional Planning; "Final Environmental Impact Report – Lancaster Landfill and Recycling Facility;" SCH No. 93101036; April 1997.

County of Los Angeles, Department of Regional Planning; General Plan; January 1993.

County of Los Angeles, Department of Regional Planning; Antelope Valley Areawide General Plan; December 4, 1986.

City of Lancaster; City of Lancaster 2020 General Plan; January 28, 2003.

Bryan A. Stirrat & Associates, Inc.; Lancaster Landfill and Recycling Center Landfill Plan.

Linscott, Law & Greenspan Engineers, Inc.; "Traffic Impact Study for the Lancaster Landfill & Recycling Center EIR;" December 23, 2003.

Giroux & Associates; " Noise Impact Study – Lancaster Landfill and Recycling Center (LLRC);" August 31, 2004.

Giroux & Associates; "Air Quality Impact Analysis – Lancaster Landfill and Recycling Center;" September 7, 2004.

Environmental Compliance Solutions; "Air Quality Technical Appendix – Lancaster Operational Emissions; March 2006.

Each of these documents is available for review at the following location:

County of Los Angeles
Department of Regional Planning
Environmental Analysis Section
320 West Temple Street
13th Floor
Los Angeles, CA 90012
ATTN: Christina Tran (213) 974-6461

CHAPTER 13.0
GLOSSARY OF ACRONYMS

AAQS	Ambient Air Quality Standard/Standards
AC	Asphalt Concrete
ADC	Alternative Daily Cover
ADWD	Average Daily Waste Disposal
ADT	Average Daily Traffic
amsl	Above Mean Sea Level
ANSI	American National Standards Institute
AQMA	Air Quality Management Area
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AVAPCD	Antelope Valley Air Pollution Control District
AVAQMD	Antelope Valley Air Quality Management District
BACT	Best Available Control Technology
BMP	Best Management Practices
CAA	Federal Clean Air Act
CAP	Corrective Action Program
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CIWMB	California Integrated Waste Management Board
CIWMP	County Integrated Waste Management Plan
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CRWQCB	California Regional Water Quality Control Board
CREF	Commerce Refuse-to-Energy Facility
CSE	County Siting Element
CUP	Conditional Use Permit
CWA	Federal Clean Water Act
DAMP	Drainage Area Management Plan
dB	Decibel
dBA	A-weighted Decibel
DEIR	Draft Environmental Impact Report
EA	Environmental Assessment
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESAL	
F	Fahrenheit
ft	Feet
HHWE	Household Hazardous Waste Element

ICU	Intersection Capacity Utilization
IS	Initial Study
LACSD	Los Angeles County Sanitation District
LCRS	Leachate Control and Removal System
LEA	Local Enforcement Agency
Leq	Equivalent Noise Level
LFG	Landfill Gas
LLRC	Lancaster Landfill and Recycling Center
Lmax	Maximum Noise Level
Lmin	Minimum Noise Level
LOS	Level of Service
MCLs	Maximum Content Levels
MDAB	Mojave Desert Air Basin
mg/l	Milligrams per Liter
MMRP	Mitigation Monitoring and Reporting Program
MNA	Monitored Natural Attenuation
MPAH	Master Plan of Arterial Highways
MRF	Material Recycling Facility
NO2	Nitrogen Dioxide
NOP	Notice of Preparation
NOx	Nitrogen Oxides
NPDES	Nation Pollution Discharge and Elimination System
O3	Ozone
PA	Planning Application
PRC	Public Resources Code
PM10	Particulates (Ten Microns or Less in Diameter)
ppm	Parts Per Million
RCPG	Regional Comprehensive Plan and Guide
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SAMP	Special Area Management Plan
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCFM	Standard Cubic Feet Per Minute
SEIR	Supplemental Environmental Impact Report
SERRF	South East Resource Recovery Facility
sf	Square Feet
SO2	Sulfur Dioxide
SWPPP	Storm Water Pollution Prevention Program
SOx	Sulfur Oxides
SSRE	Source Reduction and Recycling Element
SWFP	Solid Waste Facilities Permit

TASW	Treated Auto Shredder Waste
TDM	Transportation Demand Management
TDS	Total Dissolved Solids
TPD	Tons Per Day
TPH	Total Petroleum Hydrocarbons
USGS	United States Geological Survey
V/C	Volume/Capacity
VOC	Volatile Organic Compounds
vpd	Vehicles Per Day
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WMI	Waste Management of California, Inc.

Appendix A

Notice of Preparation

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

James E. Hartl, AICP
Director of Planning

NOTICE OF PREPARATION

LANCASTER LANDFILL AND RECYCLING CENTER
Conditional Use Permit No. 03-170

The County of Los Angeles Department of Regional Planning is the lead agency and will prepare a Supplemental Environmental Impact Report (SEIR) for the project identified below. In compliance with Section 15082 of the CEQA Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to each responsible and federal agency and interested parties involved in approving the project and to trustee agencies responsible for natural resources affected by the project. Within 30 days after receiving the NOP, each agency shall provide the County of Los Angeles with specific details about the scope and content of the environmental information related to that agency's area of statutory responsibility.

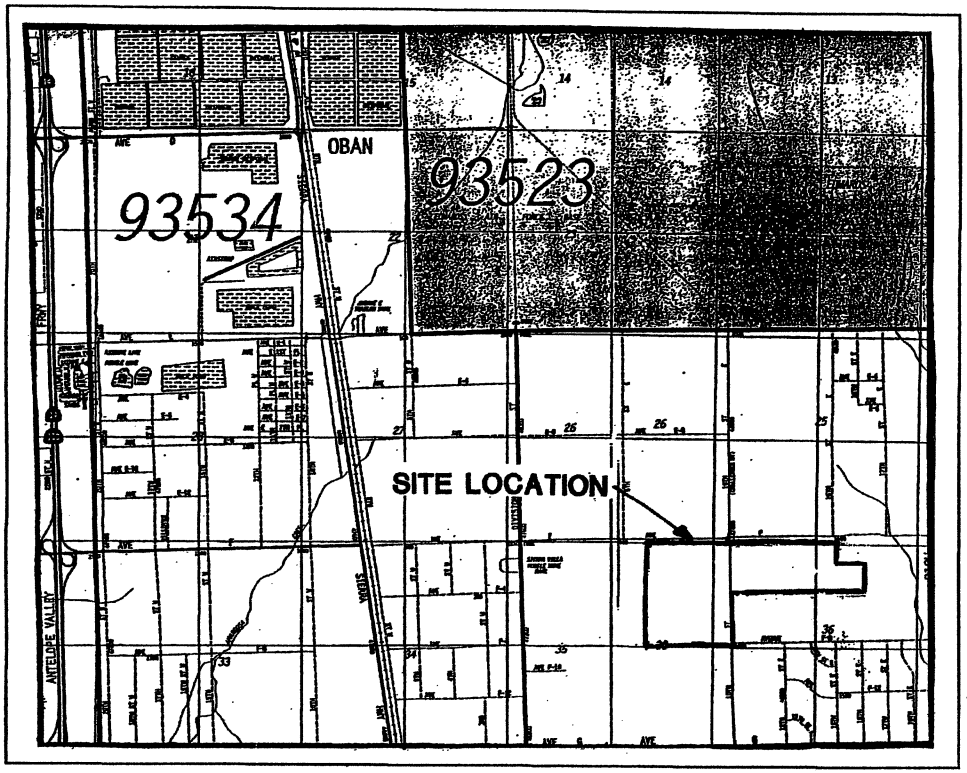
The purpose of this NOP is to solicit the views of your agency as to the scope and content of the environmental information germane to your agency's statutory authority with respect to the proposed project. Your agency may need to use the Supplemental EIR prepared by our agency when considering approval of applicable permits for the project.

PROJECT LOCATION

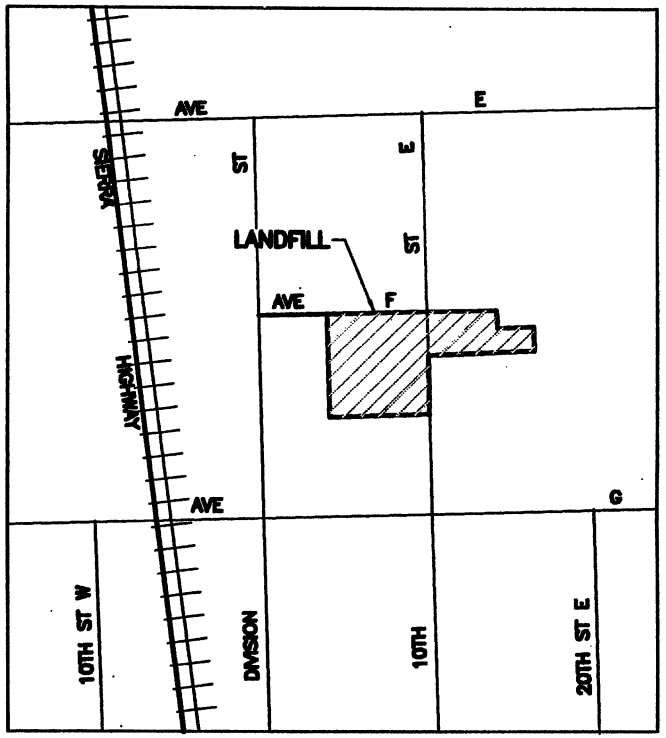
Lancaster Landfill and Recycling Center (LLRC) is located approximately two miles northeast of the City of Lancaster in the unincorporated area of Los Angeles County (see Figure 1). The LLRC property is approximately 276 acres and is bounded by Division Street on the west, East Avenue "F" on the north, East Avenue F-8 on the south with 10th Street East dividing the Eastern Expansion Area from the remainder of the landfill property. The LLRC is composed of the following components: the current landfill area (82 acres); the Western Landfill Area (62 acres); the Eastern Landfill Area (112 acres); and the 20-acre portion of the property that accommodates the landfill facilities. Figure 2 illustrates the boundaries of the existing project site and the components identified above.

Waste Management Corporation of California, Inc. has operated the Lancaster LLCR since 1973 when it acquired the site. At that time, the landfill encompassed 102 acres, including an 82-acre landfill footprint and the ancillary facilities located on the adjacent 20 acres. In 1997, the County of Los Angeles prepared and certified an Environmental Impact Report (SCH No. 1993101036) and approved the expansion of LLRC to include the 62-acre Western Landfill Area, which had previously been utilized as a borrow area (and continues to be used for borrow material used at the LLRC). That expansion

320 West Temple Street • Los Angeles, CA 90012 • 213-974-6411 • Fax: 213-626-0434 • TDD: 213-617-2292



VICINITY MAP
NTS



LOCATION MAP
NTS

Figure 1

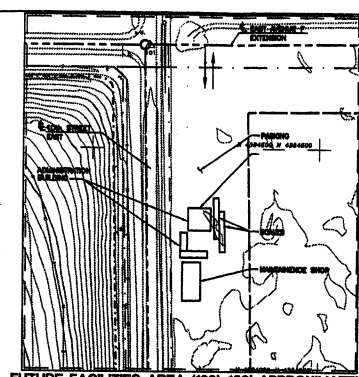
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

LANCASTER LANDFILL AND RECYCLING CENTER

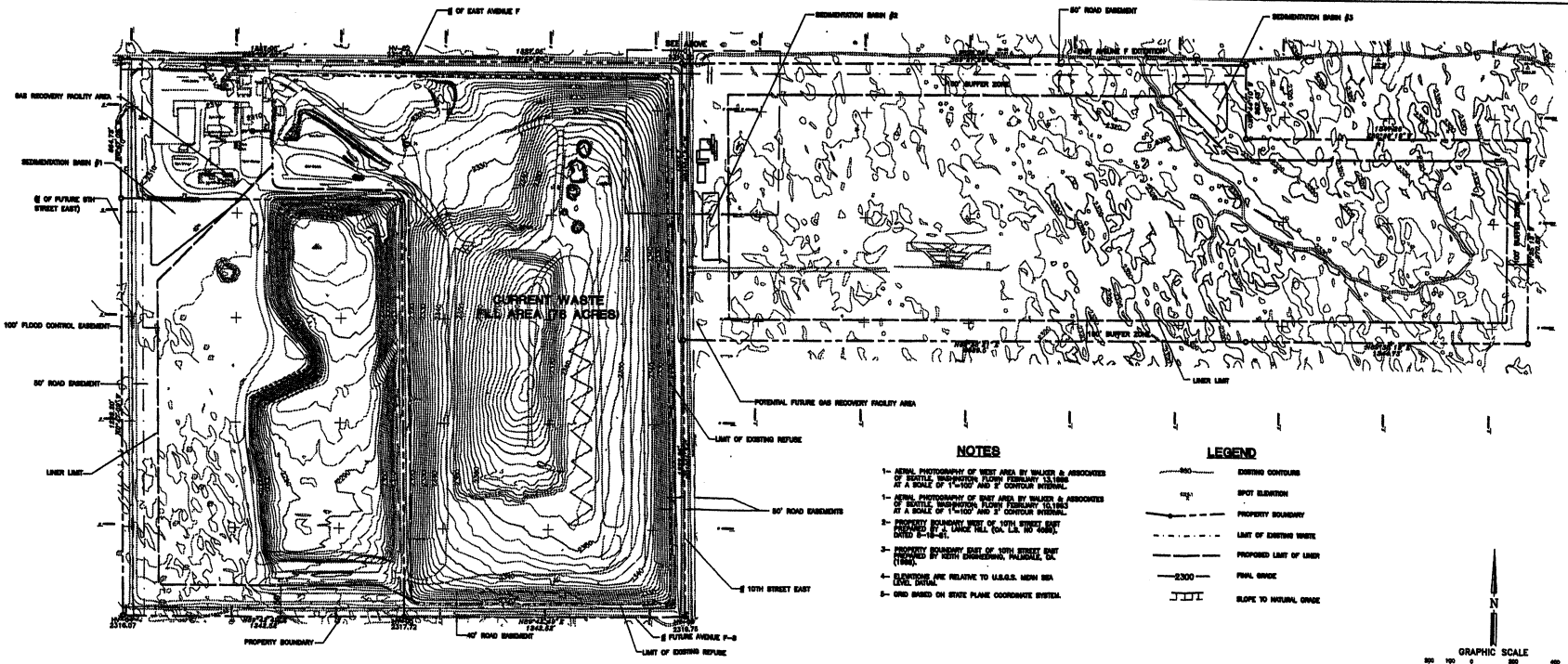
SITE LOCATION MAP

JOB NO.	2003.039
DATE	5-2004
DRAWN BY	C.A.L.
FILE NAME:	171890DB

LANDFILL PROPERTY 276-ACRES
REFUSE FOOTPRINT 209-ACRES



FUTURE FACILITIES AREA (120'x150' APPROXIMATELY)
SCALE: 1"=100'



NOTES

1- AERIAL PHOTOGRAPHY OF WEST AREA BY WALKER & ASSOCIATES OF SEATTLE, WASHINGTON; FLOWN FEBRUARY 13,1998 AT A SCALE OF 1"=100' AND 2' CONTOUR INTERVAL.

1- AERIAL PHOTOGRAPHY OF EAST AREA BY WALKER & ASSOCIATES OF SEATTLE, WASHINGTON; FLOWN FEBRUARY 10,1993 AT A SCALE OF 1"=100' AND 2' CONTOUR INTERVAL.

2- PROPERTY BOUNDARY WEST OF 10TH STREET EAST PREPARED BY J. LANCE HILL (CA. L.S. NO 4089), DATED 5-18-81.

3- PROPERTY BOUNDARY EAST OF 10TH STREET EAST PREPARED BY KEITH ENGINEERING, PALMDALE, CA. (1988).

4- ELEVATIONS ARE RELATIVE TO U.S.G.S. MEAN SEA LEVEL DATUM.

5- GRID BASED ON STATE PLANE COORDINATE SYSTEM.

LEGEND

- EXISTING CONTOURS
- SPOT ELEVATION
- PROPERTY BOUNDARY
- LIMIT OF EXISTING WASTE
- PROPOSED LIMIT OF LINER
- 2300 FINAL GRADE
- SLOPE TO NATURAL GRADE

Figure 2

REV	DATE	DESCRIPTION	DR BY	APP BY
DES BY	S.G.	2-1999	PROJECT NO.	DATE MAY 2004
DRN BY	M.T.G.	2-1999	PROJECT NO.	
CHK BY	J.R.S.	2-1999	LANCASTER LANDFILL AND RECYCLING CENTER EAST EXPANSION	
ENV BY			SHEET TITLE	
RFV BY			SITE PLAN	
APP BY				

BAS
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE
DIAMOND BAR, CALIFORNIA 19765

Waste Management of Lancaster, Inc.
LANCASTER, CALIFORNIA 93535

SHEET 2 OF 10
SHEET NO.
2

approval also included the 112-acre Eastern Landfill Area located east of the original landfilling area.

At the present time, operations of the existing Class III sanitary landfill are conducted on 102 acres of the property, including the 82-acre active landfill area and the 20 acres that support a welding shop; a maintenance building; an office building and gate house; two scales; two underground fuel tanks and fuel pumping stations; a truck and landfill equipment wash pad; potable and non-potable water tanks; a gas flare facility; and a groundwater remediation facility. In addition, there are paved areas used for employee and visitor parking as well as parking for landfill equipment. The LLRC is currently permitted to accept up to 1,700 tons per day of municipal solid waste. The site is also governed by the Waste Discharge Requirements issued by the RWQCB.

PROJECT DESCRIPTION

The applicant, Waste Management of California, Inc., requests approval to modify its current Solid Waste Facility Permit (SWFP No. 19-AA-0050) and Conditional Use Permit (CUP 93070) for the existing Class III non-hazardous solid waste landfill and recycling center. The project is proposing to increase the allowable daily intake volume from the current permitted rate of 1,700 tons per day (tpd) to 3,000 tpd of waste; exclusive of additional material that would be used for alternative daily cover (ADC) at the landfill. The landfill area encompasses a 256-acre refuse disposal footprint and a 20-acre area that is occupied by facilities that are ancillary to the landfill. The proposed project does not include a horizontal expansion of the landfill footprint, the maximum permitted capacity, nor the site in general. No new improvements or modifications are proposed to the existing facility. Operating hours will continue to be from 5:00 a.m. to 10:00 p.m., Monday through Saturday, with a maximum of 16 employees working one shift.

DISCRETIONARY ACTIONS REQUESTED

As indicated above, two discretionary action approvals are required in order to implement the proposed project. A Conditional Use Permit from the Department of Regional Planning and subsequently a Solid Waste Facility Permit from the Department of Health Services will be required, which would allow an increase in the allowable daily intake volume from the current permitted rate of 1,700 tpd to 3,000 tpd, which excludes material used for alternative daily cover (ADC) at the landfill.

POTENTIAL PROJECT IMPACTS

The County of Los Angeles, as the Lead Agency, has identified in the Initial Study (see attachment) the following potential environmental impacts to be discussed in the SEIR:

1. Noise – Project implementation will result in increased truck traffic, which could result in increased vehicular noise as well as operational use on-site associated with trash compactors, loaders, bulldozers, scrapers, etc.

2. Water Quality – Existing groundwater and storm water runoff quality may be affected by the increase of refuse accepted at the landfill on a daily basis.

3. Air Quality – The increased truck traffic could result in an exceedance of thresholds established by the SCAQMD.

4. Traffic/Access – Truck trips related to the increase in daily volume intake from 1,700 tpd to 3,000 tpd could result in significant traffic impacts to local roadways.

5. Water – The increase in daily refuse intake could result in an increase in demand for water for dust control, compaction, and irrigation.

NOTICE OF PREPARATION REVIEW AND COMMENTS

The review period for the Notice of Preparation will be from May 28, 2004 to June 28, 2004. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **July 6, 2004**. Please direct all written comments to the following address. In your written response, please include the name of a contact person in your agency.

Christina Tran
County of Los Angeles Regional Planning Department
Impact Analysis Section
320 West Temple Street, Room 1348
Los Angeles, CA 90012
Tel: (213) 974-6461
Fax: (213) 626-0434

STAFF USE ONLY

PROJECT NUMBER: *03-170*
CASES: *CUP*

*** * * * INITIAL STUDY * * * ***

COUNTY OF LOS ANGELES
DEPARTMENT OF REGIONAL PLANNING

GENERAL INFORMATION

I.A. Map Date: *February 1999* Staff Member: *Christina D. Tran*

Thomas Guide: *3926 A, B, C – 5 & 6* USGS Quad: *Lancaster East*

Location: *600 East Avenue F, Lancaster*

Description of Project: *New CUP application for the expansion of an existing Class III non- hazardous solid waste landfill and recycling center (CUP 93070) to increase the allowable daily intake volume from 1,700 tons per day (tpd) that is currently permitted to 3,000 tpd. The landfill area encompasses a 256-acre refuse disposal footprint and a 20-acre area that is occupied by facilities that are ancillary to the landfill. No new improvements or modifications are proposed to the existing facility. Operating hours will be from 5:00 a.m. to 10:00 p.m., Monday – Saturday, with a maximum of 16 employees working one shift.*

Gross Acres: *276 acres*

Environmental Setting: *Project site is currently used as a landfill and recycling center with 2.9 acres covered by structures including a ticket office, maintenance buildings, employee facilities, a paint shop, and container repair shop that are ancillary facilities. Immediate surrounding land use consists of vacant land. Nearest residences are approximately 0.5 mile west of the project site. Land uses to the north and northeast of the site include open space, scattered single-family residences approximately 1 ½ mile from the site, Piute Ponds and the southern boundary of Edwards Air Force Base.*

Zoning: *D-2-1 (Desert/Mountain – 1 acre minimum)*

General Plan: *Non-urban*

Community/Area wide Plan: *Non-urban 1 to .5 dwelling per acre (Antelope Valley Areawide GP)*

Major projects in area:

PROJECT NUMBER	DESCRIPTION & STATUS
CP99096	*RV Park, rec. room & general store (1-17-01 approved)*

NOTE: For EIRs, above projects are not sufficient for cumulative analysis.

REVIEWING AGENCIES

Responsible Agencies

- ☐ None
- ☒ Regional Water Quality Control Board
  - ☐ Los Angeles Region
  - ☒ Lahontan Region
- ☐ Coastal Commission
- ☐ Army Corps of Engineers
- ☒ *Caltrans*
- ☒ *CA Integrated Waste Management Board*

Trustee Agencies

- ☐ None
- ☒ State Fish and Game
- ☐ State Parks
- ☐
- ☐

Special Reviewing Agencies

- ☐ None
- ☐ Santa Monica Mountains Conservancy
- ☐ National Parks
- ☐ National Forest
- ☐ Edwards Air Force Base
- ☐ Resource Conservation District of Santa Monica Mtns. Area
- ☒ *City of Lancaster*
- ☒ *AQMD*
- ☒ *City of Palmdale*
- ☒ *Kern County*
- ☒ *Edwards Air Force Base*
- ☐
- ☐
- ☐

Regional Significance

- ☒ None
- ☐ SCAG Criteria
- ☐ Air Quality
- ☐ Water Resources
- ☐ Santa Monica Mtns. Area
- ☐
- ☐
- ☐

County Reviewing Agencies

- ☐ Subdivision Committee
- ☒ DPW: *Traffic & Lighting; Watershed Management (and NPDES Section); Environmental Programs; Waste Management Division; Geotechnical and Materials Engineering Division, Drainage & Grading*
- ☒ Health Services: *Solid Waste Management Program; Rural Mountain*
- ☒ Fire Department
- ☒ County Sanitation Districts

IMPACT ANALYSIS MATRIX		ANALYSIS SUMMARY (See individual pages for details)				
			Less than Significant Impact/No Impact			
				Less than Significant Impact with Project Mitigation		
					Potentially Significant Impact	
CATEGORY	**FACTOR**	Pg				Potential Concern
HAZARDS	1. Geotechnical	5	☒	☐	☐	
	2. Flood	6	☒	☐	☐	
	3. Fire	7	☒	☐	☐	
	4. Noise	8	☐	☐	☒	*Increased truck traffic and operation*
RESOURCES	1. Water Quality	9	☐	☐	☒	*Increased daily intake volume*
	2. Air Quality	10	☐	☐	☒	*Hazardous emissions*
	3. Biota	11	☒	☐	☐	
	4. Cultural Resources	12	☒	☐	☐	
	5. Mineral Resources	13	☒	☐	☐	
	6. Agriculture Resources	14	☒	☐	☐	
	7. Visual Qualities	15	☒	☐	☐	
SERVICES	1. Traffic/Access	16	☐	☐	☒	*Increased truck trips*
	2. Sewage Disposal	17	☒	☐	☐	
	3. Education	18	☒	☐	☐	
	4. Fire/Sheriff	19	☒	☐	☐	
	5. Utilities	20	☐	☐	☒	*Increased water usage for dust control*
OTHER	1. General	21	☒	☐	☐	
	2. Environmental Safety	22	☒	☐	☐	
	3. Land Use	23	☒	☐	☐	
	4. Pop/Hous./Emp./Rec.	24	☒	☐	☐	
	5. Mandatory Findings	25	☐	☐	☒	*Traffic, noise, air quality, water quality*

DEVELOPMENT MONITORING SYSTEM (DMS)

As required by the Los Angeles County General Plan, DMS* shall be employed in the Initial Study phase of the environmental review procedure as prescribed by state law.

1. Development Policy Map Designation: *Other Non-urban & Agricultural*
2. ☒ Yes ☐ No Is the project located in the Antelope Valley, East San Gabriel Valley, Malibu/Santa Monica Mountains or Santa Clarita Valley planning area?
3. ☐ Yes ☒ No Is the project at urban density and located within, or proposes a plan amendment to, an urban expansion designation?

If both of the above questions are answered "yes", the project is subject to a County DMS analysis.

☐ Check if DMS printout generated (attached)

Date of printout: _____

☐ Check if DMS overview worksheet completed (attached)

EIRs and/or staff reports shall utilize the most current DMS information available.

Environmental Finding:

FINAL DETERMINATION: On the basis of this Initial Study, the Department of Regional Planning finds that this project qualifies for the following environmental document:

☐ NEGATIVE DECLARATION, inasmuch as the proposed project will not have a significant effect on the environment.

An Initial Study was prepared on this project in compliance with the State CEQA Guidelines and the environmental reporting procedures of the County of Los Angeles. It was determined that this project will not exceed the established threshold criteria for any environmental/service factor and, as a result, will not have a significant effect on the physical environment.

☐ MITIGATED NEGATIVE DECLARATION, in as much as the changes required for the project will reduce impacts to insignificant levels (see attached discussion and/or conditions).

An Initial Study was prepared on this project in compliance with the State CEQA Guidelines and the environmental reporting procedures of the County of Los Angeles. It was originally determined that the proposed project may exceed established threshold criteria. The applicant has agreed to modification of the project so that it can now be determined that the project will not have a significant effect on the physical environment. The modification to mitigate this impact(s) is identified on the Project Changes/Conditions Form included as part of this Initial Study.

☒ ENVIRONMENTAL IMPACT REPORT*, inasmuch as there is substantial evidence that the project may have a significant impact due to factors listed above as "significant".

☒ At least one factor has been adequately analyzed in an earlier document pursuant to legal standards, and has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets (see attached Form DRP/IA 101). The EIR is required to analyze only the factors not previously addressed.

Reviewed by: Christine Fran Date: 7-16-03

Approved by: Daryl Koutnik Date: 16 JULY 2003

☐ This proposed project is exempt from Fish and Game CEQA filling fees. There is no substantial evidence that the proposed project will have potential for an adverse effect on wildlife or the habitat upon which the wildlife depends. (Fish & Game Code 753.5).

☐ Determination appealed – see attached sheet.

*NOTE: Findings for Environmental Impact Reports will be prepared as a separate document following the public hearing on the project.

HAZARDS - 1. Geotechnical

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Is the project located in an active or potentially active fault zone, Seismic Hazards Zone, or Alquist-Priolo Earthquake Fault Zone?
b.	☐	☒	☐	Is the project site located in an area containing a major landslide(s)?
c.	☐	☒	☐	Is the project site located in an area having high slope instability?
d.	☐	☒	☐	Is the project site subject to high subsidence, high groundwater level, liquefaction, or hydrocompaction?
e.	☐	☒	☐	Is the proposed project considered a sensitive use (school, hospital, public assembly site) located in close proximity to a significant geotechnical hazard?
f.	☐	☒	☐	Will the project entail substantial grading and/or alteration of topography including slopes of over 25%?
g.	☐	☒	☐	Would the project be located on expansive soil, as defined in Table 18-1-B of Uniform Building Code (1994), creating substantial risks to life or property?
h.	☐	☐	☐	Other factors?

STANDARD CODE REQUIREMENTS

☐ Building Ordinance No. 2225 – Sections 308B, 309, 310, and 311 and Chapters 29 and 70

☐ **MITIGATION MEASURES**

☐ Lot Size ☐ Project Design

☐ **OTHER CONSIDERATIONS**

☐ Approval of Geotechnical Report by DPW

Analyzed in DEIR of April 1997 for project #93070

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be impacted by, **geotechnical** factors?

☐ Potentially Significant ☐ Less than significant with project mitigation ☒ Less than significant/No Impact

HAZARDS - 2. Flood

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☐	☐	Is the major drainage course, as identified on USGS quad sheets by a dashed line, located on the project site?
				Drainage course traverse a small corner of the property to the east
b.	☒	☐	☐	Is the project site located within or does it contain a floodway, floodplain, or designated flood hazard zone?
				Drainage course traverse a small corner of the property to the east
c.	☐	☒	☐	Is the project site located in or subject to high mudflow conditions?
d.	☐	☒	☐	Could the project contribute or be subject to high erosion and debris deposition from run-off?
e.	☐	☒	☐	Would the project substantially alter the existing drainage pattern of the site or area?
f.	☐	☐	☒	Other factors (e.g., dam failure)?
				Dam or debris basin flood boundaries

STANDARD CODE REQUIREMENTS

☐ Building Ordinance No. 2225 – Section 308A ☐ Ordinance No. 12,114 (Floodways)

☐ Approval of Drainage Concept by DPW

☐ **MITIGATION MEASURES** ☒ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design

Analyzed in DEIR of April 1997 for project #93070

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be impacted by **flood (hydrological)** factors?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

HAZARDS - 3. Fire

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Is the project site located in a Very High Fire Hazard Severity Zone (Fire Zone 4)?
b.	☐	☒	☐	Is the project site in a high fire hazard area and served by inadequate access due to lengths, width, surface materials, turnarounds or grade?
c.	☐	☒	☐	Does the project site have more than 75 dwelling units on a single access in a high fire hazard area?
d.	☐	☒	☐	Is the project site located in an area having inadequate water and pressure to meet fire flow standards?
e.	☐	☒	☐	Is the project located in close proximity to potential dangerous fire hazard conditions/uses (such as refineries, flammables, explosives manufacturing)?
f.	☐	☒	☐	Does the proposed use constitute a potentially dangerous fire hazard?
g.	☐	☐	☐	Other factors?

STANDARD CODE REQUIREMENTS

☐ Water Ordinance No. 7834 ☐ Fire Ordinance No. 2947 ☐ Fire Regulation No. 8
☐ Fuel Modification / Landscape Plan

☐ **MITIGATION MEASURES** ☒ **OTHER CONSIDERATIONS**

☐ Project Design ☐ Compatible Use

No new improvements proposed; analyzed in DEIR of April 1997 for project #93070

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be impacted by **fire hazard** factors?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

HAZARDS - 4. Noise

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☒	☐	Is the project site located near a high noise source (airports, railroads, freeways, industry)?
b.	☒	☒	☐	Is the proposed use considered sensitive (school, hospital, senior citizen facility) or are there other sensitive uses in close proximity?
c.	☒	☐	☐	Could the project substantially increase ambient noise levels including those associated with special equipment (such as amplified sound systems) or parking areas associated with the project? *Increased truck traffic, trash compactors, loaders, bulldozers, scrapers, etc.*
d.	☒	☒	☐	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels without the project?
e.	☒	☐	☐	Other factors? *Equipment noise levels range from approximately 70 dBA to over 100 dBA at a Distance of 50 feet from operating equipments*

STANDARD CODE REQUIREMENTS

☐ Noise Control (Title 12 – Chapter 8) ☐ Uniform Building Code (Title 26 - Chapter 35)

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design ☐ Compatible Use

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be adversely impacted by **noise**?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

RESOURCES - 1. Water Quality

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☐	☐	Is the project site located in an area having known water quality problems and proposing the use of individual water wells? *Existing water well*
b.	☒	☐	☐	Will the proposed project require the use of a private sewage disposal system? *Existing septic system*
	☒	☒	☐	If the answer is yes, is the project site located in an area having known septic tank limitations due to high groundwater or other geotechnical limitations *or* is the project proposing on-site systems located in close proximity to a drainage course?
c.	☐	☐	☒	Could the project's associated construction activities significantly impact the quality of groundwater and/or storm water runoff to the storm water conveyance system and/or receiving water bodies? *Landfills are subject to NPDES requirements*
d.	☐	☐	☒	Could the project's post-development activities potentially degrade the quality of storm water runoff and/or could post-development non-storm water discharges contribute potential pollutants to the storm water conveyance system and/or receiving bodies? *Landfills are subject to NPDES requirements*
e.	☒	☐	☐	Other factors? *Landfill and waste materials*

STANDARD CODE REQUIREMENTS

☐ Industrial Waste Permit
☐ Plumbing Code – Ordinance No.2269
☐ Health Code – Ordinance No.7583, Chapter 5
☒ NPDES Permit Compliance (DPW)

☐ **MITIGATION MEASURES**
☐ Lot Size ☐ Project Design ☐ Compatible Use

☐ **OTHER CONSIDERATIONS**

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be adversely impacted by, **water quality** problems?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

RESOURCES - 2. Air Quality

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Will the proposed project exceed the State's criteria for regional significance (generally (a) 500 dwelling units for residential users or (b) 40 gross acres, 650,000 square feet of floor area or 1,000 employees for non-residential uses)?
b.	☐	☒	☐	Is the proposal considered a sensitive use (schools, hospitals, parks) and located near a freeway or heavy industrial use?
c.	☐	☐	☒	Will the project increase local emissions to a significant extent due to increased traffic congestion or use of a parking structure or exceed AQMD thresholds of potential significance per Screening Tables of the CEQA Air Quality Handbook? *Request 75% increase in daily capacity*
d.	☒	☐	☐	Will the project generate or is the site in close proximity to sources that create obnoxious odors, dust, and/or hazardous emissions? *Open landfill*
e.	☐	☒	☐	Would the project conflict with or obstruct implementation of the applicable air quality plan?
f.	☐	☒	☐	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?
g.	☒	☐	☐	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standard (including releasing emission which exceed quantitative thresholds for ozone precursors)? *Increase in operation from 1,700 tpd to 3,000 tpd*
h.	☐	☐	☐	Other factors?

STANDARD CODE REQUIREMENTS

☐ Health and Safety Code – Section 40506

☐ **MITIGATION MEASURES**

☐ Project Design ☐ Air Quality Report

☐ **OTHER CONSIDERATIONS**

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, or be adversely impacted by, **air quality**?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

RESOURCES - 3. Biota

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Is the project site located within Significant Ecological Area (SEA), SEA Buffer, or coastal Sensitive Environmental Resource (ESHA, etc.), or is the site relatively undisturbed and natural?
b.	☐	☒	☐	Will grading, fire clearance, or flood related improvements remove substantial natural habitat areas?
c.	☒	☐	☐	Is a major drainage course, as identified on USGS quad sheets by a blue dashed line, located on the project site? *Unnamed drainage course*
d.	☐	☒	☐	Does the project site contain a major riparian or other sensitive habitat (e.g. coastal sage scrub, oak woodland, sycamore riparian, woodland, wetland, etc.)?
e.	☒	☐	☐	Does the project site contain oak or other unique native trees (specify kinds of trees)? *Approximately 150 Joshua trees*
f.	☒	☐	☐	Is the project site habitat for any known sensitive species (federal or state listed endangered, etc.)? *Mojave ground squirrels, desert tortoise*
g.	☐	☐	☐	Other factors (e.g., wildlife corridor, adjacent open space linkage)?

☐ **MITIGATION MEASURES**
☐ Lot Size ☐ Project Design

☒ **OTHER CONSIDERATIONS**
☐ ERB/SEATAC Review ☐ Oak Tree Permit

Analyzed in DEIR of April 1997 for project #93070

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on, **biotic** resources?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

RESOURCES - 4. Archaeological/Historical/Paleontological

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☐	☐	Is the project site in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) that indicate potential archaeological sensitivity?
				Unnamed drainage course traverse a corner of property to the east
b.	☐	☒	☐	Does the project site contain rock formations indicating potential paleontological resources?
c.	☐	☒	☐	Does the project site contain known historic structures or sites?
d.	☐	☒	☐	Would the project cause a substantial adverse change in the significance of a historical or archaeological resource as defined in 15064.5?
e.	☐	☒	☐	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
f.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☒ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design ☐ Phase 1 Archaeology Report

Analyzed in DEIR of April 1997 for project #93070

CONCLUSION

Considering the above information, could the project leave a significant impact (individually or cumulatively) on **archaeological, historical,** or **paleontological** resources?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

RESOURCES - 5.Mineral Resources

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
b.	☐	☒	☐	Would the project result in the loss of availability of a locally important mineral resource discovery site delineated on a local general plan, specific plan or other land use plan?
c.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design

CONCLUSION

Considering the above information, could the project leave a significant impact (individually or cumulatively) on **mineral** resources?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

RESOURCES - 6. Agriculture Resources

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?
b.	☐	☒	☐	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
c.	☐	☒	☐	Would the project involve other changes in the existing environment that due to their location or nature, could result in conversion of Farmland, to non-agricultural use?
d.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design

CONCLUSION

Considering the above information, could the project leave a significant impact (individually or cumulatively) on **agriculture** resources?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

RESOURCES - 7. Visual Qualities

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Is the project site substantially visible from or will it obstruct views along a scenic highway (as shown on the Scenic Highway Element), or is it located within a scenic corridor or will it otherwise impact the viewshed?
b.	☐	☒	☐	Is the project substantially visible from or will it obstruct views from a regional riding or hiking trail?
c.	☐	☒	☐	Is the project site located in an undeveloped or undisturbed area that contains unique aesthetic features?
d.	☐	☒	☐	Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?
e.	☐	☒	☐	Is the project likely to create substantial sun shadow, light or glare problems?
f.	☐	☐	☐	Other factors (e.g., grading or landform alteration)?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design ☐ Visual Report ☐ Compatible Use

CONCLUSION

Considering the above information, could the project leave a significant impact (individually or cumulatively) on **scenic** qualities?

☐ Potentially Significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

SERVICES - 1. Traffic/Access

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☐	☐	Does the project contain 25 dwelling units, or more and is it located in an area with known congestion problems (roadway or intersections)?
b.	☐	☒	☐	Will the project result in any hazardous traffic conditions?
c.	☐	☒	☐	Will the project result in parking problems with a subsequent impact on traffic conditions?
d.	☐	☒	☐	Will inadequate access during an emergency (other than fire hazards) result in problems for emergency vehicles or residents/employees in the area?
e.	☒	☐	☐	Will the congestion management program (CMP) Transportation Impact Analysis thresholds of 50 peak hour vehicles added by project traffic to a CMP highway system intersection or 150 peak hour trips added by project traffic to a mainline freeway link be exceeded? *Truck trips related to increase in daily volume intake from 1,700 tpd to 3,000 tpd*
f.	☐	☒	☐	Would the project conflict with adopted policies, plans, or program supporting alternative transportation (e.g., bus, turnouts, bicycle racks)?
g.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Project Design ☐ Traffic Report ☐ Consultation with Traffic & Lighting Division

CONCLUSION

Considering the above information, could the project leave a significant impact (individually or cumulatively) on **traffic/access** factors?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

SERVICES - 2. Sewage Disposal

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	If served by a community sewage system, could the project create capacity problems at the treatment plant?
b.	☐	☒	☐	Could the project create capacity problems in the sewer lines serving the project site?
c.	☐	☐	☐	Other factors?

STANDARD CODE REQUIREMENTS

☐ Sanitary Sewers and Industrial Waste – Ordinance No. 6130

☐ Plumbing Code – Ordinance No. 2269

☐ **MITIGATION MEASURES** ☒ **OTHER CONSIDERATIONS**

Private septic system; no new improvements proposed

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on the physical environment due to **sewage disposal** facilities?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

SERVICES - 3. Education

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Could the project create capacity problems at the district level?
b.	☐	☒	☐	Could the project create capacity problems at individual schools that will serve the project site?
c.	☐	☒	☐	Could the project create student transportation problems?
d.	☐	☒	☐	Could the project create substantial library impacts due to increased population and demand?
e.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Site Dedication ☐ Government Code Section 65995 ☐ Library Facilities Mitigation Fee

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) relative to **educational** facilities/services?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

SERVICES - 4. Fire/Sheriff Services

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Could the project create staffing or response time problems at the fire station or sheriff's substation serving the project site?
b.	☐	☒	☐	Are there any special fire or law enforcement problems associated with the project or the general area?
c.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES**

☐ Fire Mitigation Fee

☐ **OTHER CONSIDERATIONS**

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) relative to **fire/sheriff** services?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

SERVICES - 5. Utilities/Other Services

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☐	☒	Is the project site in an area known to have an inadequate public water supply to meet domestic needs or to have an inadequate ground water supply and proposes water wells? *No public water*
b.	☐	☐	☒	Is the project site in an area known to have an inadequate water supply and/or pressure to meet fire fighting needs? *No public water*
c.	☐	☒	☐	Could the project create problems with providing utility services, such as electricity, gas, or propane?
d.	☐	☒	☐	Are there any other known service problem areas (e.g., solid waste)?
e.	☐	☒	☐	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 or facilities (e.g., fire protection, police protection, schools, parks, roads)?
f.	☒	☐	☐	Other factors? *Increased water usage for dust control, compaction, and irrigation*

STANDARD CODE REQUIREMENTS

☐ Plumbing Code – Ordinance No. 2269 ☐ Water Code – Ordinance No. 7834

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) relative to **utilities** services?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

OTHER FACTORS - 1. General

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Will the project result in an inefficient use of energy resources?
b.	☐	☒	☐	Will the project result in a major change in the patterns, scale, or character of the general area or community?
c.	☐	☒	☐	Will the project result in a significant reduction in the amount of agricultural land?
d.	☐	☐	☐	Other factors?

STANDARD CODE REQUIREMENTS

☐ State Administrative Code, Title 24, Part 5, T-20 (Energy Conservation)

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

☐ Lot Size ☐ Project Design ☐ Compatible Use

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on the physical environment due to any of the above factors?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

OTHER FACTORS - 2. Environmental Safety

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☒	☐	☐	Are any hazardous materials used, transported, produced, handled, or stored on-site? *Paint, gasoline, diesel fuel, oil, hydraulic fluid*
b.	☒	☐	☐	Are any pressurized tanks to be used or any hazardous wastes stored on-site? *Acetylene and oxygen tanks, propane tanks*
c.	☐	☒	☐	Are any residential units, schools, or hospitals located within 500 feet and potentially adversely affected?
d.	☒	☐	☐	Have there been previous uses that indicate residual soil toxicity of the site? *50 years of landfill use*
e.	☐	☒	☐	Would the project create a significant hazard to the public or the environment involving the accidental release of hazardous materials into the environment?
f.	☐	☒	☐	Would the project emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
g.	☐	☒	☐	Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment?
h.	☐	☒	☐	Would the project result in a safety hazard for people in a project area located within an airport land use plan, within two miles of a public or public use airport, or within the vicinity of a private airstrip?
i.	☐	☒	☐	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
j.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES**

☐ Toxic Clean-up Plan

☒ **OTHER CONSIDERATIONS**

Hazardous materials will not exceed the maximum amounts established for the site – landfill is lined

CONCLUSION

Considering the above information, could the project have a significant impact relative to **public safety**?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

OTHER FACTORS - 3. Land Use

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Can the project be found to be inconsistent with the plan designation(s) of the subject property?
b.	☐	☒	☐	Can the project be found to be inconsistent with the zoning designation of the subject property?
c.				Can the project be found to be inconsistent with the following applicable land use criteria:
	☐	☒	☐	Hillside Management Criteria?
	☐	☒	☐	SEA Conformance Criteria?
	☐	☐	☐	Other?
d.	☐	☒	☐	Would the project physically divide an established community?
e.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on the physical environment due to **land use** factors?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

OTHER FACTORS - 4. Population/Housing/Employment/Recreation

SETTING/IMPACTS

	Yes	No	Maybe	
a.	☐	☒	☐	Could the project cumulatively exceed official regional or local population projections?
b.	☐	☒	☐	Could the project induce substantial direct or indirect growth in an area (e.g., through projects in an undeveloped area or extension of major infrastructure)?
c.	☐	☒	☐	Could the project displace existing housing, especially affordable housing?
d.	☐	☒	☐	Could the project result in substantial job/housing imbalance or substantial increase in Vehicle Miles Traveled (VMT)?
e.	☐	☒	☐	Could the project require new or expanded recreational facilities for future residents?
f.	☐	☒	☐	Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
g.	☐	☐	☐	Other factors?

☐ **MITIGATION MEASURES** ☐ **OTHER CONSIDERATIONS**

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on the physical environment due to **population, housing, employment,** or **recreational** factors?

☐ Potentially significant ☐ Less than significant with project mitigation ☒ Less than significant/No impact

MANDATORY FINDINGS OF SIGNIFICANCE

Based on this Initial Study, the following findings are made:

	Yes	No	Maybe	
a.	☐	☒	☐	Does the project have the potential to substantially 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 possible environmental effects that are individually limited but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of an individual 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. *Traffic, air quality, water quality, water supply, noise*
c.	☐	☒	☐	Will the environmental effects of the project cause substantial adverse effects on human beings, either directly or indirectly?

CONCLUSION

Considering the above information, could the project have a significant impact (individually or cumulatively) on the environment?

☒ Potentially significant ☐ Less than significant with project mitigation ☐ Less than significant/No impact

Notice of Completion

See NOTE below
SCH # _____

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 (916) 445-0613

Project Title: *Lancaster Landfill and Recycling Center (CUP 03-170)*
Lead Agency: *L. A. County Department of Regional Planning* Contact Person: *Christina Tran*
Street Address: *320 West Temple Street* Phone: *(213) 974 6461*
City: *Los Angeles* *CA* Zip: *90012* County: *Los Angeles*

Project Location
County: *Los Angeles* City/Nearest Community: *Lancaster*
Cross Streets: *Avenue G/Division Street* Total Acres: _____
Assessor=s Parcel No. _____ Section: *35 & 36* Twp. *8N* Range: *12W* Base: *SBBM*
Within 2 Miles: State Hwy #: *SR-14* Waterways: *Amargosa Creek*
Airports: _____ Railways: _____ Schools: _____

Document Type
CEQA: ☒ NOP ☐ Supplement/Subsequent ☐ EIR (Prior SCH No.) _____ ☐ Other _____
☐ Early Cons ☐ Neg Dec ☐ Draft EIR
NEPA: ☐ NOI Other: ☐ EA ☐ Draft EIS ☐ FONSI
☐ Joint Document ☐ Final Document ☐ Other _____

Local Action Type
☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☒ Use Permit ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other _____

Development Type
☐ Residential: *Units* _____ *Acres* _____
☐ Office: *Sq.ft.* _____ *Acres* _____ *Employees* _____
☐ Commercial: *Sq.ft.* _____ *Acres* _____ *Employees* _____
☐ Industrial: *Sq.ft.* _____ *Acres* _____ *Employees* _____
☐ Educational _____
☐ Recreational _____
☐ Water Facilities: *Type* _____ *MGD* _____
☐ Transportation: *Type* _____
☐ Mining: *Mineral* _____
☐ Power: *Type* _____ *Watts* _____
☐ Waste Treatment: *Type* _____
☐ Hazardous Waste: *Type* _____
☒ Other: *Solid Waste Facility (256 acres)*

Project Issues Discussed In Document
☐ Aesthetic/Visual ☐ Agricultural Land ☒ Air Quality ☐ Archeological/Historical ☐ Coastal Zone ☐ Drainage/Absorption ☐ Economic/Jobs ☐ Fiscal
☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☐ Geologic/Seismic ☐ Minerals ☒ Noise ☐ Population/Housing Balance ☐ Public Services/Facilities ☐ Recreation/Parks
☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☐ Soil Erosion/Comp./Grading ☐ Solid Waste ☐ Toxic/Hazardous ☒ Traffic/Circulation ☐ Vegetation
☒ Water Quality ☒ Water Supply/Groundwater ☐ Wetland/Riparian ☐ Wildlife ☐ Growth Inducing ☐ Land Use ☐ Cumulative Effects ☐ Other

Present Land Use/Zoning/General Plan Use
Landfill and recycling center/Desert/Mountain - 1 acre minimum/Non-urban

Project Description
Request for a CUP to allow an increase in the allowable daily intake volume for the existing Class III non-hazardous solid waste landfill and recycling center from the current permitted rate of 1,700 tons per day (tpd) to 3,000 tpd, excluding the additional material that would be used for alternative daily cover at the landfill.

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.

Revised October 1989

Reviewing Agencies Checklist

KEY
S = Document sent by lead agency
X = Document sent by SCH
R = Suggested distribution

Resources Agency
_____ Boating & Waterways
_____ Coastal Commission
_____ Coastal Conservancy
_____ Colorado River Board
_____ Conservation
R Fish & Game
_____ Forestry
_____ Office of Historic Preservation
_____ Parks & Recreation
_____ Reclamation
_____ S.F. Bay Conservation & Development Commission
_____ Water Resources (DWR)

Business, Transportation & Housing
_____ Aeronautics
_____ California Highway Patrol
R CALTRANS District # *7*
_____ Department of Transportation Planning (headquarters)
_____ Housing & Community Development
_____ Food & Agriculture

Health & Welfare
_____ Health Services _____

State & Consumer Services
_____ General Services
_____ OLA (Schools)

Environmental Affairs
_____ Air Resources Board
R APCD/AQMD
R California Waste Management Board
_____ SWRCB: Clean Water Grants
_____ SWRCB: Delta Unit
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
R Regional WQCB # . (*Lahontan*)

Youth & Adult Corrections
_____ Corrections

Independent Commissions & Offices
_____ Energy Commission
_____ Native American Heritage Commission
_____ Public Utilities Commission
_____ Santa Monica Mountains Conservancy
_____ State Lands Commission
_____ Tahoe Regional Planning Agency

_____ Other _____

Public Review Period (to be filled in by lead agency)

Starting Date *May 28, 2004*

Ending Date *June 28, 2004*

Signature Christina Bran

Date *May 26, 2004*

Lead Agency (complete if applicable):

Applicant: *Waste Management of California, Inc.*
Address: *600 East Avenue "F"*
City/State/Zip: *Lancaster, CA 93535*
Phone: *(661) 945-5944*

Consultant: *Bryan A. Stirrat & Associates, Inc.*
Address: *1360 Valley Vista Drive, Suite 200*
City/State/Zip: *Diamond Bar, CA 91765*
Phone: *(909) 860-7777*

For SCH Use Only:
Date Received at SCH: _____
Date Review Starts: _____
Date to Agencies: _____
Date to SCH: _____
Clearance Date: _____
Notes:

Revised October 1989

Lancaster Landfill and Recycling Center
NOP Distribution List
May 26, 2004
(Certified Mail)

Los Angeles County

Department of Regional Planning (2 copies)
Impact Analysis Section
320 West Temple St., Room 1348
Los Angeles, CA 90012
Attn: Christina Tran

Department of Health Services (1 copy + county memo)
Mountain & Rural/Water, Sewerage & Subdivision Programs
5050 Commerce Drive
Baldwin Park, CA 91706-1423
Attn: Environmental Review

Department of Health Services (1 copy + county memo)
Solid Waste Management Program
5050 Commerce Drive
Baldwin Park, CA 91706-1423

Department of Public Works (7 copies + DPW cover letter)
Watershed Management Division
900 South Fremont Avenue
Alhambra, CA 91803
Attn: Dan Lafferty

County of Los Angeles Fire Department (3 copies + FD cover letter)
Forestry Division, Prevention Bureau
5823 Rickenbacker Rd., Rm. 123
Commerce, CA 90040
Attn: Ms. Cusick

County of Los Angeles Sheriff Department (1 copy + county memo)
Director of Facilities Planning / Mr. Gary T. K. Tse
Building A9-East/5th Floor North
1000 S. Fremont Avenue
Alhambra, CA 91803

Attn: Mr. Michael Kameya

County of Los Angeles Sheriff Department (1 copy + county memo)
Lancaster – Area # 2
501 W. Lancaster Blvd.
Lancaster, CA 93534
Attn: Environmental Review

Los Angeles County – County Clerk Office (with a $25 check payable to the County Clerk)
12400 Imperial Highway
P.O. Box 53592
Norwalk, CA 90650

County of Los Angeles (1 copy + county memo)
Sanitation Districts
P.O. Box 4998
Whittier, CA 90607-4998
Attn: Environmental Review

State Agencies

California Regional Water Quality Control Board
Lahontan Region
15428 Civic Dr., Ste. 100
Victorville, CA 92392
Attn: Environmental Review

Caltrans – District 7
IGR / CEQA Coordinator
Transportation Planning & Analysis
120 S. Spring Street
Los Angeles, CA 90012

California Integrated Waste Management Board
Permitting and Inspection Branch, MS #15
1001 I Street
P.O. Box 4025
Sacramento, CA 95812-4025

California Department of Fish and Game
4949 Viewridge Avenue

San Diego, CA 92123
Attn: Environmental Review

Scott Harris
Department of Fish and Game
South Coast Region 5
1508 North Harding Avenue
Pasadena, CA 91104

State Clearinghouse (15 copies + NOC Form)
P.O. Box 3044
Sacramento, CA 95812-3044
Attn: Environmental Review

Southern California Association of Governments
818 W. 7th Street, 12th Floor
Los Angeles, CA 90017
Attn: Environmental Review

Local And Other Agencies

City of Palmdale
Planning Department
38300 N. Sierra Hwy.
Palmdale, CA 93550-4798
Attn: Environmental Review

Lancaster Department of Community Development
44933 North Fern Avenue
Lancaster, CA 93534
Attn: Environmental Review

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182
Attn: Environmental Review

Antelope Valley Air Pollution Control District
District Office
43301 Division Street, Suite 206
Lancaster, CA 93535

Kern County Planning Department
2700 M Street, Suite 290
Bakersfield, CA 93301

AFFTC/XPX
1 South Rosamond Boulevard
Edwards Air Force Base, CA 93524-1036

COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

THOMAS L. GARTHWAITE, M.D.
Director of Health Services and Chief Medical Officer

JONATHAN E. FIELDING, M.D., M.P.H.
Director of Public Health and Health Officer

Environmental Health
ARTURO AGUIRRE, R.E.H.S., M.A.
Director of Environmental Health

Bureau of Environmental Protection
Solid Waste Management Program/L.A. County LEA
5050 Commerce Drive Baldwin Park, California 91706-1423
TEL (626) 430-5540 • FAX (626) 813-3022
www.lapublichealth.org/eh

BOARD OF SUPERVISORS
Gloria Molina
First District
Yvonne Brathwaite Burke
Second District
Zev Yaroslavsky
Third District
Don Knabe
Fourth District
Michael D. Antonovich
Fifth District

June 29, 2004

Christina Chan
Department of Regional Planning
Impact Analysis Section
320 West Temple St
Los Angeles, CA 90012

RE: NOTICE OF PREPARATION FOR LANCASTER LANDFILL AND RECYCLING CENTER CONDITIONAL USE PERMIT NO. 03-170

Dear Christina Tran,

The County of Los Angeles, Department or Health Services, Solid Waste Management Program (SWMP) has reviewed the Notice of Preparation for the increase in tonnage at the Lancaster Landfill and Recycling Center (LLRC). Waste Management of California Inc. (WM), is requesting to modify its current Solid Waste Facility Permit and Conditional Use Permit in order to increase their permitted daily tonnage of 1,700 tons per day (tpd) to 3,000 tpd of waste.

SWMP staff has identified some possible environmental impacts that would result from the requested increase in tonnage. The following areas should be addressed in the Supplemental Environmental Impact Report, along with mitigation measures for each:

1) **Water Quality** – WM has had problems in the past with ground water contamination. Although there are no current problems with ground water contamination, an increase in tonnage may pose a threat to water quality. LLRC is an old landfill, receiving waste over an unlined area. Although future expansions will require a liner, water quality may be at risk if the permitted tpd is increased over this unlined area.

2) **Noise** – With the increase in tonnage, the amount of vehicle traffic to and from LLRC will also increase. More landfill disposal equipment will be needed to handle the tonnage increase, thus contributing to an increase in noise.

3) **Air Quality** – The increase in vehicle traffic and heavy equipment operation at the landfill will increase the amount of dust that is generated on a daily basis.

4) **Traffic** – Although the landfill is located in a fairly remote area, the increase in vehicle traffic volume may impact the streets and roads of the neighboring community. Traffic studies may be needed to determine the effects of increased traffic on the local roads. Also, LLRC has a small entrance gate and is currently limited to one inbound and one outbound scale. The increase in vehicle traffic may cause delays to disposal vehicles attempting to enter and exit the disposal facility during peak hours. Additional scales and a redesigned entrance gate may be required to accommodate the increase in vehicle traffic.

The aforementioned comments identify possible environmental impacts and solid waste concerns that may result from the requested increase in tonnage at LLRC.

If you have any questions, please call me at (626) 430-5540.

Sincerely,

Mark Como

Mark Como, EHS III
Solid Waste Management Program

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

Officers: President: Councilmember Ron Roberts, Temecula • First Vice President: Supervisor Hank Kuiper, Imperial County • Second Vice President: Toni Young, Port Hueneme • Immediate Past President: Councilmember Bev Perry, Brea

Imperial County: Hank Kuiper, Imperial County • Jo Shields, Brawley

Los Angeles County: Yvonne Brathwaite Burke, Los Angeles County • Zev Yaroslavsky, Los Angeles County • Harry Baldwin, San Gabriel • Paul Bowlen, Cerritos • Tony Cardenas, Los Angeles • Margaret Clark, Rosemead • Gene Daniels, Paramount • Mike Dispenza, Palmdale • Judy Dunlap, Inglewood • Eric Garcetti, Los Angeles • Wendy Greuel, Los Angeles • Frank Gurulé, Cudahy • James Hahn, Los Angeles • Janice Hahn, Los Angeles • Isadore Hall, Compton • Tom LaBonge, Los Angeles • Bonnie Lowenthal, Long Beach • Martin Ludlow, Los Angeles • Keith McCarthy, Downey • Llewellyn Miller, Claremont • Cindy Miscikowski, Los Angeles • Paul Nowatka, Torrance • Pam O'Connor, Santa Monica • Alex Padilla, Los Angeles • Bernard Parks, Los Angeles Jan Perry, Los Angeles • Beatrice Proo, Pico Rivera Ed Reyes, Los Angeles • Greig Smith, Los Angeles Dick Stanford, Azusa • Tom Sykes, Walnut • Paul Talbot, Alhambra • Sidney Tyler, Pasadena • Tonia Reyes Uranga, Long Beach • Antonio Villaraigosa, Los Angeles • Dennis Washburn, Calabasas • Jack Weiss, Los Angeles • Bob Yousefian, Glendale • Dennis Zine, Los Angeles

Orange County: Chris Norby, Orange County • Ronald Bates, Los Alamitos • Lou Bone, Tustin • Art Brown, Buena Park • Richard Chavez, Anaheim Debbie Cook, Huntington Beach • Cathryn DeYoung, Laguna Niguel • Richard Dixon, Lake Forest • Alta Duke, La Palma • Bev Perry, Brea • Tod Ridgeway, Newport Beach

Riverside County: Marion Ashley, Riverside County • Thomas Buckley, Lake Elsinore • Bonnie Flickinger, Moreno Valley • Ron Loveridge, Riverside • Greg Pettis, Cathedral City • Ron Roberts, Temecula

San Bernardino County: Paul Biane, San Bernardino County • Bill Alexander, Rancho Cucamonga • Edward Burgnon, Town of Apple Valley • Lawrence Dale, Barstow • Lee Ann Garcia, Grand Terrace • Susan Longville, San Bernardino • Gary Ovitt, Ontario • Deborah Robertson, Rialto

Ventura County: Judy Mikels, Ventura County • Glen Becerra, Simi Valley • Carl Morehouse, San Buenaventura • Toni Young, Port Hueneme

Orange County Transportation Authority: Charles Smith, Orange County

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Simi Valley

Printed on Recycled Paper 559-3/10/04

RECEIVED
JUN 9 2004

June 8, 2004

Ms. Christina Tran
County of Los Angeles Regional
Planning Department
320 S. Temple Street, Room 1348
Los Angeles, CA 90012

RE: SCAG Clearinghouse No. I 20040315 Lancaster Landfill and Recycling Center

Dear Ms. Tran:

Thank you for submitting the **Lancaster Landfill and Recycling Center** 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 **Lancaster Landfill and Recycling Center**, 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). 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 **May 16-31, 2004** 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,

JEFFREY M. SMITH, AICP
Senior Regional Planner
Intergovernmental Review

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE: (213) 897-3747
FAX: (213) 897-1337

RECEIVED
JUN 10 2004

Flex your power!
Be energy efficient!

IGR/CEQA No. 040561AL, NOP
Lancaster Landfill and Recycling Center (CUP 03-170)
Vic. LA-14 / PM R72.0
SCH # 2004061006

June 8, 2004

Christina Tran
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

Dear Mr. Tran:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project.

To assist us in our efforts to evaluate the impacts of this project on State transportation facilities, a traffic study in advance of the DEIR should be prepared. We wish to refer the project's traffic consultant to our traffic study guideline Website:

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

and we list here some elements of what we generally are expecting in the traffic study:

1. Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to State Route 14, 138, on/off ramps at Ave. D, Ave. F, and Ave. G.

2. Consistency of project travel modeling with other regional and local modeling forecasts and with travel data. The IGR/CEQA office may use indices to check results. Differences or inconsistencies must be thoroughly explained.

3. Analysis of ADT, AM and PM peak-hour volumes for both the existing and future conditions in the affected area. This should include freeways, interchanges, and intersections, and all HOV facilities. Interchange Level of Service should be specified (HCM2000 method requested). Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions would include build-out of all projects (see next item) and any plan-horizon years.

4. Inclusion of all appropriate traffic volumes. Analysis should include traffic from the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments. That is, include: existing + project + other projects + other growth.

5. Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. These mitigation discussions should include, but not be limited to, the following:

    - Description of Transportation Infrastructure Improvements
    - **Financial Costs, Funding Sources and Financing**
    - Sequence and Scheduling Considerations
    - Implementation Responsibilities, Controls, and Monitoring

    Any mitigation involving transit, HOV, or TDM must be rigorously justified and its effects conservatively estimated. Improvements involving dedication of land or physical construction may be favorably considered.

6. Specification of developer's percent share of the cost, as well as a plan of realistic mitigation measures under the control of the developer. The following ratio should be estimated: additional traffic volume due to project implementation is divided by the total increase in the traffic volume (see Appendix "B" of the Guidelines). That ratio would be the project equitable share responsibility.

    We note for purposes of determining project share of costs, the number of trips from the project on each traveling segment or element is estimated in the context of forecasted traffic volumes which include build-out of all approved and not yet approved projects, and other sources of growth. Analytical methods such as select-zone travel forecast modeling might be used.

    The Department as commenting agency under CEQA has jurisdiction superceding that of MTA in identifying the freeway analysis needed for this project. Caltrans is responsible for obtaining measures that will off-set project vehicle trip generation that worsens Caltrans facilities and hence, it does not adhere to the CMP guide of 150 or more vehicle trips added before freeway analysis is needed. MTA's Congestion Management Program in acknowledging the Department's role, stipulates that Caltrans must be consulted to identify specific locations to be analyzed on the State Highway System. Therefore State Route(s) mentioned in item #1 and its facilities must be analyzed per the Department's Traffic Impact Study Guidelines.

We look forward to reviewing the traffic study. We expect to receive a copy from the State Clearinghouse when the DEIR is completed. However, to expedite the review process, and clarify any misunderstandings, you may send a copy in advance to the undersigned.

If you have any questions, please feel free to contact me at (213) 897-3747 or Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 040561AL.

Sincerely,

Cheryl Powell

CHERYL J. POWELL
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

RECEIVED
JUN 10 2004

June 4, 2004

Ms. Christina Tran
County of Los Angeles Regional Planning Dept.
Impact Analysis Section
320 West Temple Street, Room 1348
Los Angeles, CA 90012

Dear Ms. Tran:

Notice of Preparation of a Draft Environmental Impact Report for Lancaster Landfill and Recycling Center

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2002 Model. This model is available on the CARB Website at: www.arb.ca.gov.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis. An analysis of all toxic air contaminant impacts due to the

decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

LAC040527-01LI
Control Number

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Services"

JAMES A. NOYES, Director

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: T-4

March 11, 2004

Post-it® Fax Note 7671	Date 3/16/04	# of pages ▸ 2
To Socheata Chhouk	From Nick VanGunst	
Co./Dept. LLG	Co. LACDPW	
Phone # 714 641 1587	Phone # 626 300 4760	
Fax # 714 641 0139	Fax # 626 300 4736	

Ms. Trissa (de Jesus) Allen
Linscott Law & Greenspan
1580 Corporate Drive, Suite 122
Costa Mesa, CA 92626

Dear Ms. Allen:

LANCASTER LANDFILL AND RECYCLING CENTER
TRAFFIC IMPACT STUDY (DECEMBER 23, 2003)
CONDITIONAL USE PERMIT 03170
LOS ANGELES COUNTY

As requested, we have reviewed the above-mentioned document. The project site is located at 600 Avenue F in the unincorporated area of the County of Los Angeles.

The project proposes to increase Municipal Solid Waste (MSW) operations from the current permitted maximum daily refuse inflow of 1,700 tons per day (tpd) to a maximum of 3,000 tpd. Currently, the facility accepts an average of 1,100 tpd of MSW, and 345 to 1,600 tpd of recyclables, cover/contaminated soil, and greenwaste. The proposed project does not include any modifications to current operations related to recyclables, soils, and greenwaste. The landfill is in the process of relocating its trucking operations to Palmdale, which will significantly reduce the amount of waste brought to the site by front-end and residential packer trucks. The project is estimated to generate a net increase of 128 passenger car equivalent (pce) vehicle trips daily, with 32 and 29 pce vehicle trips during the a.m. and p.m. peak hours, respectively.

We agree with the study that the traffic generated by the project alone, or the cumulative traffic generated by the project and other related projects will not significantly impact the County and County/City intersections in the area. We also agree with the study that the project does not have significant impacts to the Congestion Management Program monitored intersections, arterials, or freeways.

NV.

Asphaltic concrete pavement deteriorates with increase of truck traffic. The project shall be responsible for the improvements on each roadway segment based on the 10-year traffic indices (TI's) shown below. These improvements shall be in place with the issuance of the conditional use permit. The Materials Engineering Lab Section of the Geotechnical and Materials Engineering Division shall be contacted for the actual pavement overlay required for the "With Project" TI.

LIMITS		WITHOUT PROJECT	WITH PROJECT W/O AVE F EXT.	PERCENT SHARE
10th Street between Avenue F and Avenue G		7.5	8.0	100

We recommend Caltrans and the Cities of Lancaster and Palmdale review this document for California Environmental Quality Act level of significant traffic impacts/mitigations within their jurisdictions.

If you have any questions, please contact Mr. Suen Fei Lau of our Traffic Studies Section at (626) 300-4820.

Very truly yours,

JAMES A. NOYES
Director of Public Works

William Winter

WILLIAM J. WINTER
Assistant Deputy Director
Traffic and Lighting Division

NV:cn
EIR04007

cc: Regional Planning (Daryl Koutnik)

bc: Watershed Management

California Integrated Waste Management Board

Linda Moulton-Patterson, Chair
1001 I Street • Sacramento, California 95814 • (916) 341-6000
Mailing Address: P. O. Box 4025, Sacramento, CA 95812-4025
www.ciwmb.ca.gov

Terry Tamminen
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

RECEIVED
JUL 8 2004
RECEIVED
JUN 30 2004
STATE CLEARING HOUSE

June 30, 2004

Ms. Christina Tran
Los Angeles County Department of Regional Planning
320 West Temple
Los Angeles, CA 90012

Subject: **SCH No. 2004061006** – Notice of Preparation of a Draft Environmental Impact Report for the amendment of a Conditional Use Permit for the expansion of daily tonnage intake at Lancaster Landfill and Recycling Center, Solid Waste Facilities Permit No. 19-AA-0050, City of Lancaster, Los Angeles County

Dear Ms. Tran:

Board staff of the California Integrated Waste Management Board (CIWMB or Board) has reviewed the document cited above. Following is a description of the proposed project based on Board staff's understanding of the project as described in the Notice of Preparation. If the proposed Project Description below varies substantially from the project as understood by the Lead Agency; Board staff requests that any significant differences be clarified and included in the Draft Environmental Impact Report.

PROPOSED PROJECT DESCRIPTION

The proposed project is an amendment to the Conditional Use Permit. The proposed amendment would include modifications to the current operating conditions; allowing an increase in the allowable daily intake volume for the existing Class III non-hazardous solid waste site from the current permitted rate of 1,700 tons per day to 3,000 tons per day, excluding the material that would be used for alternate daily cover.

The project site is located approximately two miles northeast of the City of Lancaster. The site is approximately 276 acres and is bounded by Division Street on the west, East Avenue "F" on the north, East Avenue F-8 on the south with 10th Street East dividing the Eastern Expansion Area from the remainder of the landfill property. The landfill site is composed of the following components: the current landfill area (82 acres); the western landfill area (62 acres); the eastern landfill area (112 acres); and the 20-acre portion of the property that accommodates the landfill facilities.

The proposed project does not include a horizontal expansion of the landfill footprint; the maximum permitted capacity, or the site in general. No new improvements or modifications are proposed to the

existing facility. Operating hours will continue to be from 5:00 am to 10:00 pm, Monday through Saturday, with a maximum of 16 employees working one shift

Existing Permit

- **Maximum Permitted Tonnage**: 1700 tons per day
- **Maximum Permitted Traffic Volume**: None Specified
- **Permitted Hours of Operation**: 5:00 am to 10:00 pm
- **Permitted Hours Receipt of Refuse**: 5:00 am to 8:00 pm
- **Permitted Days of Operation**: Monday through Saturday
- **Total Permitted Site Area**: 276 acres

Proposed Permit

- **Maximum Permitted Peak Tonnage**: 3000 tons per day, exclusive of material used for alternative daily cover
- **Maximum Permitted Peak Traffic Volume**: None Specified
- **Permitted Hours of Operation**: 5:00 am to 10:00 pm
- **Permitted Hours Receipt of Refuse**: 5:00 am to 8:00 pm
- **Permitted Days of Operation**: Monday through Saturday
- **Total Permitted Site Area**: Unclear

BOARD STAFF'S COMMENTS

For clarity and convenience, questions and comments that Board staff is seeking a specific response to will be *italicized* so the reader can more easily locate and respond to them.

To assist Board staff's analysis and evaluation of this project, and aid in the determination of the adequacy of the Environmental Impact Report and related CEQA document(s), we request that the following comments and questions be addressed in the Draft Environmental Impact Report under preparation by the Lead Agency prior to circulation of the document. Much of the information needed for a clear and detailed project description is normally included in a facility's Report of Facility Information (RFI) for a Solid Waste Facility. If an RFI has been developed that incorporates Lancaster's project description, that RFI may be incorporated or referenced in the Draft Environmental Impact Report.

As required by 14 CCR §§ 15126.2, 15126.4 and 15126.6, Board staff requests that the Draft Environmental Impact Report contain detailed considerations and discussions of the significant effects, mitigation measures and alternatives for the proposed project including the alternative of "no project."

The Draft Environmental Impact Report must detail all provisions in order to indicate the ability of the facility to meet State Minimum Standards for environmental protection (see 27 CCR §§ 20005, et. seq. and 14 CCR §§ 17000 et. seq.). The following Internet link accesses checklists developed by Board staff as a guide to Lead Agencies in the preparation of Environmental Impact Reports for landfills: http://www.ciwmb.ca.gov/LEACentral/CEQA/disposal.htm .

Acceptable Waste

Indicate in the Draft Environmental Impact Report the types of waste to be accepted as well as those types of waste to be excluded. Discuss load checking/screening procedures. Describe procedures for handling hazardous waste and/or Household Hazardous Waste that may come in self-haul and (1) *commercial loads that are not detected through load checking. Describe policies and procedures for handling Universal Waste. Describe any "free dump" days when the peak permitted tonnage might be exceeded and the public might bring in items otherwise not normally acceptable, such as Household Hazardous Waste, tires or batteries, as an example.*

Hours of Operation

The environmental document indicates that the operating hours will continue to be from 5:00 am to 10:00 pm. The current hours for Operations are Monday Through Saturday 5:00 am to 10:00 pm and Receipt of Refuse are Monday through Saturday 5:00 am to 8:00 pm. *If it is the intent of the operator to* (2) *operate during other hours and days than those previously mentioned this must be discussed in detail in the draft environmental document*

(3) *If the public is allowed to deliver waste to the landfill, what will be the hours of acceptance of waste from self-hauls?*

Tonnage

The Notice of Preparation indicates that the operator wishes to expand operations to accept a peak tonnage of 3000 tons of refuse per day, six days a week; and not to count material to be used as alternative daily cover against the peak tonnage of 3000 tons per day.

(4) *All material that passes over the scale and/or enters the landfill must be analyzed for in the environmental document. The Board as a Responsible Agency is concerned with the landfill's ability to handle and process all materials that are delivered to the landfill for disposal, beneficial use, recycling for other uses or processes.*

(5) *Soil and contaminated soil that is to be brought to the landfill from sources outside the landfill boundary and the vehicles used to deliver the soil must be analyzed for in the draft environmental documents. The exception is, soil that is to be used for daily cover and contaminated soil that is to be used for alternative daily cover is not counted against the peak daily tonnages of material entering the landfill.*

If there are any questions regarding the issue of counting alternative daily cover, other than contaminated soil against peak daily tonnage please see LEA Advisory 25, it can be found at http://www.ciwmb.ca.gov/LEAAdvisory/25/default.htm.

Alternative Daily Cover

The Notice of Preparation mentioned alternative daily cover but there was no discussion of the types and (6) use of daily cover. *The use of alternative daily cover and the types of alternative daily cover must be discussed in the draft environmental document. The mere fact that the types of alternative daily cover*

are mentioned in regulations does not in and of itself give permission to the operator to pick and choose the type they wish to use.

Disposal Area

The total acreage designated for the landfill area and the acreage designated for the disposal area are unclear. The current permit indicates a total of 276 acres with disposal area of 209 acres. The Notice of Preparation indicates the following:

Lancaster Landfill and Recycling

	Disposal Areas	Non-Disposal Areas	Total Landfill Acreage
Eastern Landfill Area	112		
Western Landfill Area	62		
Current Landfill Area	82		
Landfill Facilities		20	
Total Landfill Acreage			**276**

(7) *In the draft environmental document please reconcile the above information from the Notice of Preparation to the proposed project and the current permit. It appears that the landfill has been reduced in size since the August 2000 permit. Have the other areas been closed and gone through final closure? Please clearly explain the status of the other 174 acres (Eastern Landfill Area and Western Landfill Area).*

(8) *Figure 2 in the Notice of Preparation indicates a Current Waste Fill Area of 78 acres. What relationship is this to the 82 acres referred to as the Current Landfill Area?*

(9) *In the draft environmental document provide accurate and to scale maps and drawings delineating the different areas of the landfill, indicating their acreage and their status, open, open with intermediate cover, closed with intermediate cover, closed with final cover, etcetera.*

Estimated Closure Date

(10) With an expansion in peak daily tonnage, there will be acceleration in the filling of the landfill. *What is the anticipated Estimated Closure Date?*

Traffic

(11) There is no Permitted Traffic Volume indicated on the August 2000 Solid Waste Facilities Permit. *Since this proposed project would have traffic impacts, please include a traffic study in the draft environmental document. To assist Board staff and the Local Enforcement Agency in determining the*

peak Permitted Traffic Volume for this facility, please indicate clearly the peak number of vehicles to enter this site on a daily basis, the impacts, both significant and non-significant and proposed mitigation measures.

Mitigation Reporting or Monitoring Program

As required by Public Resource Code (PRC), § 21081.6, the Lead Agency should submit a Mitigation Reporting or Monitoring Program at the time of local certification of an Environmental Impact Report or adoption of a Mitigated Negative Declaration. This plan should identify the environmental impacts associated with the proposed project, identify mitigation measures to reduce impacts to a less than significant level, identify agencies responsible for ensuring the implementation of the proposed mitigations, and specifies a monitoring/tracking mechanism. PRC, § 21080 (c)(2) requires that mitigation measures "...avoid the effects or mitigate the effects to the point where clearly no significant effects on the environment would occur." The Mitigation Reporting or Monitoring Program is also required as a condition of project approval. PRC § 21081.6(b) also requires that "A public agency shall provide the measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures."

The Mitigation Reporting or Monitoring Program should also indicate that agencies designated to enforce mitigation measures in the Mitigated Negative Declaration have reviewed the Mitigation (19) *Reporting or Monitoring Program and agreed that they have the authority and means to accomplish the designated enforcement responsibilities.*

ROLE OF THE BOARD

The Board must ensure that Solid Waste Facilities meet required State Minimum Standards for the protection of public health, safety and the environment. The Board implements this goal through programs such as: permit oversight for Solid Waste Facilities, certification and evaluation of Local Enforcement Agencies (LEA), which administer specific provisions of the Integrated Waste Management Act of 1989. Review of environmental documents for proposed, new or expanded Solid Waste Facilities for compliance with CEQA, enforcement of State Minimum Standards for Solid Waste Facilities, corrective action programs for facilities out of compliance with State Minimum Standards and research and development for special waste management issues.

California Environmental Quality Act Review

CEQA compliance is required for the establishment, expansion or change in operation(s) of a Solid Waste Facility requiring the issuance or revision of a Solid Waste Facilities Permit. Board staff's review of the Draft Environmental Impact Report is to help decision-makers (1) identify potential impacts from proposed projects, (2) determine whether any such impacts are significant, and (3) ascertain whether significant impacts can be mitigated to a level of insignificance in compliance with the CEQA statute and guidelines. In order for Board staff to ascertain that the Draft Environmental Impact Report is complete and adequate for our use in the Solid Waste Facilities Permit permitting process, the proposed project should be described in sufficient detail and the potential environmental impacts must be identified clearly in the environmental assessment/Initial Study Section of the Draft Environmental Impact Report. Mitigating measures to reduce potentially significant environmental impacts should be

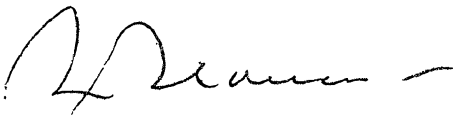
incorporated into the project, when feasible, in order to avoid potentially significant effects upon project implementation. When a potential significant environmental effect is identified and an argument is made as to why no mitigation is necessary, the discussion/analysis should be in sufficient detail that the reviewer/decision-maker can understand the Lead Agency's reasoning for their determination. In order to expedite document preparation and minimize redundancy - supporting documentation and/or studies would be helpful and should be incorporated by referenced in the Draft Environmental Impact Report.

CONCLUSION

Board staff requests copies of any subsequent or revised environmental documents in addition to the Draft and Final Environmental Impact Reports. Any subsequent or revised environmental documents should be circulated through the State Clearinghouse as required in 14 CCR §15205(a) of the CEQA Guidelines. The Board requests being noticed of the date, time and location of any public hearings regarding the project proposal at least ten days in advance.

Board staff has no further comments on the project as proposed at this time. Thank you for the opportunity to comment on this project in the early planning stages. Permitting and Inspection staff are available for any planned scoping meetings, workshops or other public meetings. If you have any questions regarding these comments, please contact me at 916.341.6728 or e-mail me at rseamans@ciwmb.ca.gov.

Sincerely,



Raymond M. Seamans
Permitting and Inspection Branch
Environmental Review, Region 4
Permitting and Enforcement Division
California Integrated Waste Management Board

cc: William Marciniak
Permitting and Inspection Branch, Region 4
Permitting and Enforcement Division
California Integrated Waste Management Board

Suzanne Hambleton, Supervisor
Permitting and Inspection Branch, Region 4
Permitting and Enforcement Division
California Integrated Waste Management Board

Virginia Maloles, Chief
County of Los Angeles
Department of Health Services
5050 Commerce Drive
Baldwin Park, CA 90716

County of Los Angeles
Sheriff's Department Headquarters
4700 Ramona Boulevard
Monterey Park, California 91754-2169

Leroy D. Baca, Sheriff

RECEIVED
JUL 15 2004

July 8, 2004

Christina Tran, Regional Planner II
County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012

Dear Ms. Tran:

ENVIRONMENTAL DOCUMENT REVIEW
NOTICE OF PREPARATION
LANCASTER LANDFILL AND RECYCLING CENTER CUP NO. 03-170

This is in response to your letter dated May 26, 2004, for the above identified project. We have completed our review and assessment of the project description and plans.

We have determined the project will not have a negative impact on the operations of the Department, as well as the service level of the Lancaster Sheriff's Station.

Should you have any questions regarding this matter, please contact Mr. Mike Kameya, of my staff at (626) 300-3013.

Sincerely,

LEROY D. BACA, SHERIFF

Gary T. K. Tse, Director
Facilities Planning Bureau

GTKT:MK:mk/ij

Attachment

cc: Victor Rampulla
Carl H. Deeley, Captain, Lancaster Sheriff's Station
Gordon Carn, Lieutenant, Lancaster Sheriff's Station
Frank Williams
Henry Yee
Mike Kameya
Chrono
File
(LancasterRecyclingCenterCUPNo.03-170)

Post-it® Fax Note 7671	Date 6/24/04
To CHRISTINA TRAN	From ROD
Co./Dept. D.R.P.	Co. DPW
Phone # 213-974-6461	Phone # 626
Fax #	Fax #

June 24, 2004

MM-4

TO: Christina Tran
Department of Regional Planning

FROM: Rod Kubomoto
Watershed Management Division

RESPONSE TO A NEGATIVE DECLARATION
CONDITIONAL USE PERMIT NO. 03-170
UNINCORPORATED COUNTY OF LOS ANGELES
LANCASTER

Thank you for the opportunity to provide comments on the subject document which we received on May 26, 2004. The proposed project consists of new Conditional Use Permit application for the expansion of an existing Class III non-hazardous solid waste landfill and recycling center to increase the allowable daily intake volume from 1,700 tons per day that is currently permitted to 3,000 tons per day. The landfill area encompasses a 256-acre refuse disposal footprint and a 20-acre area that is occupied by facilities that are ancillary to the landfill. No new improvements or modifications are proposed to the existing facility. The 276-acres is located at 600 East Avenue F in the unincorporated community of Lancaster.

Environmental Programs

The Los Angeles County Countywide Siting Element, which was approved in late 1997 by a majority of the cities in the County of Los Angeles with a majority of the cities' population and by the County Board of Supervisors in January 1998, projected that a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. A number of landfill closures (BKK and Spadra Landfills, etc.) have been experienced in recent years and more closures are expected to occur in the near future. The Siting Element recognizes the need for in-County disposal capacity and includes a policy to support expansion of existing landfills in the County of Los Angeles including Lancaster Landfill and Recycling Center (LLRC), as long as it is determined to be environmentally and technically feasible.

The subject proposal requires a Finding of Conformance from the Los Angeles County Integrated Waste Management Task Force. This is in accordance with the Los Angeles County Countywide Integrated Waste Management Plan which was approved by the California Integrated Waste Management Board on June 23, 1999. The Siting Element, which is an element of the County Countywide Integrated Waste Management Plan, requires that all new and expansion of existing solid waste disposal facilities is consistent with its goals, policies, and siting criteria.

(1) The draft Environmental Impact Report (EIR) should include a discussion on the type of landfill gas migration detection and control measures that will be used to minimize, to the maximum extent possible, subsurface lateral migration of landfill gas beyond the perimeter of the landfill.

(2) The draft EIR should include discussion on the type of leachate treatment system proposed for the collected leachate (i.e., on- or off-site) and how the treated leachate and effluent will be finally managed.

(3) The draft EIR should include discussion on the waste diversion activities at the site including the use of alternative daily cover. The discussion must include the types and quantities of materials to be received for diversion and/or as cover materials in excess of the proposed daily disposal tonnage.

(4) The draft EIR should include discussion of the impact that an increase in allowable daily intake for Lancaster Landfill will have on the life of the landfill, expected closure date and any other impacts to the County's solid waste management infrastructure. Additionally, the draft EIR should include fill sequencing plans detailing the sequences of fill operations.

(5) The draft EIR should include a site plan, in addition to Figure 2 included in the Notice of Preparation, which shows the current grades based on the latest topographic survey and the final grades as well as delineate the extent of the fill areas.

(6) The draft EIR should include a description of the anticipated sources of waste materials to be deposited at the site (e.g., jurisdictions of origin).

(7) The Notice of Preparation states that "hazardous materials will not exceed the maximum amounts established for the site landfill is lined," (page 22 Other Factors-2 Environmental Safety, Los Angeles County Department of Regional Planning, Initial Study), should be discussed in full detail. The Draft Environmental Impact Report

should clarify what this statement means since Lancaster Landfill is a non-hazardous solid waste landfill facility.

(8) The draft EIR should reference National Pollutant Discharge Elimination System (NPDES) Permit No. CAS614001 issued by the California Regional Water Quality Control Board, Los Angeles Region, to the County, local cities, and government agencies. The document should indicate that the project will comply with all County and appropriate city requirements in stormwater quality management upon adoption of such requirements. All appropriate NPDES Permits should be secured from the State and local Water Quality Control Boards prior to any construction activities. This document should fully address debris cleanup procedures on truck routes to the site during wet seasons to avoid such debris from adversely impacting the quality of stormwater in the neighboring drains.

(9) N/A Should any operation within the subject project include the construction, installation, modification, or removal of underground storage tanks and/or industrial waste control disposal facilities, Environmental Programs Division (EPD) must be contacted for required approvals and operating permits.

(10) Any necessary mitigation measure monitoring program performed by EPD will require a funding account to be established by the project proponent to pay for the required services. The amount of necessary funds will be determined at the time of monitoring. EPD must be contacted to establish the funding account.

If you have any questions, please contact Martins Aiyetiwa at (626) 458-3553.

Geotechnical and Materials Engineering

The proposed project will not have significant environmental effects from a geology and soils standpoint, provided the appropriate ordinances and codes are followed.

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

Land Development

Hydrology and Standard Urban Storm Water Mitigation Plan (SUSMP) Review

There are no comments regarding hydrology, SUSMP, and sewer at this time

(11) Because the applicant did not indicate the existing water facilities are adequately available for this project, we recommend that this report not be approved until the applicant has adequately addressed the water supply availability for the subject proposal. This includes meeting the domestic water as well as fire flow/fire hydrants requirements. All equipment shall be of adequate size and capacity and shall be correlated with available supply from the source facilities (ground water and storage to meet the requirements of Section 20.16.030 and 20.16.060 of the Los Angeles County Code. The analysis report must be reviewed and approved by Public Works prior to inclusion of this report. A deposit is required to review documents and plans.

If you have any questions, please contact Michael Hales at (626) 458-4921.

Traffic and Lighting

Our previous comments in our memo of March 18, 2004 (copy attached), are still valid and applicable to the supplemental Environmental Impact Report as long as no changes have been made to the Traffic Impact Study dated December 23, 2003.

If you have any questions, please contact Michelle Melonakis at (626) 300-4769.

Watershed Management

(12) 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.

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

RD
6/24 MM:ro
C:\MyFiles\MM\CUP03-170.doc

Attach.

bc: Geotechnical and Materials Engineering
Land Development
Traffic and Lighting
Watershed Management (Munroe)

APPLICANT

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

5823 Rickenbacker Road
Commerce, California 90040

DATE: June 17, 2004

TO: Department of Regional Planning
Permits and Variances

SUBJECT: CUP 03-170

LOCATION: 600 East Avenue F, Lancaster

☐ The Fire Department has no additional requirements for this permit.

☐ The required fire flow for this development is ____ gallons per minute for _ hours. The water mains in the street, fronting this property must be capable of delivering this flow at 20 pounds per square inch residual pressure.

☐ Install __ Public and/or __ On-site and/or __ Verify / Upgrade 6" X 4" X 2 1/2" fire hydrants, conforming to AWWA C503-75 or approved equal. All installations must meet Fire Department specifications. Fire hydrant systems must be installed in accordance with the Utility Manual of Ordinance 7834 and all installations must be inspected and flow tested prior to final approval.

☒ **Comments:** The proposed expansion of the "Landfill" is required to comply with Department's Regulation 10. Verify the square footage of the exisitng buildings. A Class II Standpipe System shall be provied and located within 200 feet of dumping operations and shall have 1 1/2-inch hose with a variable-fog nozzle to reach all portions of such operations. The use of water tender trucks may be permitted in lieu of a Class II Standpipe System provided each one is equipped with an 2 1/2-inch outlets for fire department use.

☒ **Location:** Identify the location of the existing fire hydrants.

☒ **Access:** Approved access roads shall be provided and maintained at all times around the dumping areas to provide access for firefighting equipment per LACoFD Code Section 902.2.1. Provide fire access roads shall have an unobstructed width of not less than 20 feet and an unobstructive vertical clearance clear to the sky. The entrances to roads, trails, or other access ways which have been closed with gates and barriers in accordance with LACoFD Code Section 902.2.4.2 shall be obstructed by parked vehicles. Weeds, grass and combustible vegetation shall be removed for a distance of 10 feet on both sides of all access roads used by rubbish trucks or the public.

☒ **Special Requirements:** A fire break or the clearance of all dry weeds and grass shall be provided around the dumping areas. Secondary firebreaks, as required by the Fire Department, shall be provided and maintained in order to prevent the spread of fire beyond the dump facility. Such secondary firebreaks shall be not less than 60 feet in width.

The property shall be adequately fenced to prevent entry of unauthorized persons and gates shall be locked at all times when the facility is not supervised. An attendent shall be on duty when the site is open to the public.

Smoking Restrictions: "NO SMOKING" signs shall be posted on the facility and at all entrances to the facitlity. Smoking regulations will be strictly enforced.

Dumping operations shall be carried on in such a manner as to minimize the possibility of fire occurring in a waste material. Waste material dumbed on the premises shall be immediately mixed with earth, and under no circumstances shall be exposed surface or face of combustable materials be left uncovered at the close of daily operations.

Any fire which occurs on the premises shall be reported immediately to the Fire Department and it shall be the responsibility of the operator to immediatley extinguish any such fire. A telephone shall be installed for the prupose of notifing the Fire Departmetn in case of fire.

Provisions shall be made to control or prevent the blowing of papers or other combustible waste materials into the brush or outside the established dumping areas. The premises shall be kept free of any accumulations of waste combustible materials which might constitute a fire menace.

Fire Protection facilities; including access must be provided prior to and during construction. Should any questions arise regarding this matter, please feel free to call our office @ (323) 890-4243.

Inspector: Wally Collins

Co.CUP 04/04

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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

DONALD L. WOLFE, Director

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

May 17, 2006

IN REPLY PLEASE
REFER TO FILE: LD-0

TO: Daryl Koutnik
Department of Regional Planning

Attention Christina Tran

FROM: Rossana D'Antonio
Land Development Division

RESPONSE TO REVIEW OF A SCREENCHECK DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT LANCASTER LANDFILL AND RECYCLING CENTER CONDITIONAL USE PERMIT 03-170

We reviewed the Screencheck Draft Supplemental Environmental Impact Report (SEIR) for the Lancaster Landfill and Recycling Center. According to our files, we provided the traffic consultant with the attached comments in January 2006; however, the SEIR does not reflect these comments. The improvement requested in our letter must be in place before there can be an increase in operations.

We also recommend that the project be made accountable to fully improve the pavement on the following streets: (a) Avenue F between Division Street and 10th Street West, (b) Division Street between Avenue F and Avenue G, (c) 10th Street West between Avenue F and Avenue G, (d) Avenue G between 100 feet west of the southbound SR-14 on/off ramps and 10th Street East. If Avenue F between Sierra Highway and Division Street is constructed, the project shall also be responsible to improve Avenue F between 100 feet west of the southbound SR-14 on/off ramps and Sierra Highway

The following comments are also applicable:

1. Page 1-2, last paragraph: The SEIR lists the "...general objectives of the County of Los Angeles for solid waste management." These objectives have since been superseded by the June 1997 Los Angeles County Countywide Siting Element (CSE). As such, the objectives listed on top of page 1-3 should be revised as appropriate to be consistent with the goals and policies of the CSE. A copy of the CSE will be available online at www.solidwastedrs.org effective June 1, 2006.

2. Page 1-3, second bullet: The SEIR states "Provide a regional resource within the Lancaster area that..." This statement should be revised to replace "Lancaster" with "Antelope Valley."

3. Page 2-3, Table 2-1: Please add the Los Angeles County Integrated Waste Management Task Force under the Agency column and in the corresponding box under Permit/Approval insert "Finding of Conformance."

4. Page 3-7, Household Hazardous Waste: The SEIR states " WMI supports the County's household hazardous waste programs identified in the Household Hazardous Waste Element of the Los Angeles..." Replace the word "of" with "and."

5. Page 3-7, Unacceptable/Prohibited Wastes: The SEIR should include a discussion on the procedures implemented at the site to prevent disposal of radioactive wastes.

6. Page 3-9, Daily Cover: The SEIR states "When available, contaminated soil meeting regulatory requirements..." Revise this statement to read "When available, contaminated *nonhazardous* soil meeting regulatory requirements..."

7. Page 3-9, Residential and Commercial Recycling: The SEIR states "Two categories of recyclables (i.e., green/wood waste and mixed waste) are collected by curbside collection vehicles and temporarily stored on-site until transported to a processing facility." This statement is ambiguous and needs to be clarified. It gives the impression that Lancaster Landfill and Recycling Center is also permitted as a transfer station. If the facility is also planning on operating as a transfer station, the document should provide a discussion and analysis on its impacts.

8. Section 3.4, Project Need: The information in this section is outdated and needs to be revised. For instance on page 3-27: third paragraph, the document states "...The Puente Hills and Sunshine Canyon Landfills have daily and weekly maximum tonnage levels..." The Puente Hills Landfill no longer has a weekly tonnage limit. Also, it does not include a discussion on the Mesquite Regional Landfill in Imperial County, which is a major component of the proposed Waste-By-Rail system for Los Angeles County. Please refer to the Los Angeles County Integrated Waste Management Plan, 2004 Annual Report for updated information. An electronic copy of this report is available at www.solidwastedrs.org.

9. Under Section 3.5, the SEIR should include a description of the anticipated sources of waste materials to be deposited at the site (e.g., jurisdictions of origin).

10. Appendix A, Initial Study, page 22: Other Factors-2. Environmental Factors, the Initial Study states "Hazardous materials will not exceed the maximum amounts established for the site - landfill is lined." We requested clarification of this issue during the Notice of Preparation phase, and it still has not been addressed. Please clarify what this statement means since the Lancaster Landfill is a nonhazardous solid waste landfill facility.

11. The Los Angeles County Countywide Siting Element, which was approved in late 1997 by a majority of the cities in the County of Los Angeles with a majority of the cities' population and by the County Board of Supervisors in January 1998, projected that a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. A number of landfill closures have been experienced in recent years and more closures are expected to occur in the near future. The Siting Element recognizes the need for in-County disposal capacity and includes a policy to support expansion of existing landfills in the County of Los Angeles, including Lancaster Landfill and Recycling Center, as long as it is determined to be environmentally and technically feasible.

12. The proposed project requires a Finding of Conformance from the Los Angeles County Integrated Waste Management Task Force. This is in accordance with the Los Angeles County Countywide Integrated Waste Management Plan, which was approved by the California Integrated Waste Management Board on June 23, 1999. The Siting Element, which is an element of the Los Angeles County Countywide Integrated Waste Management Plan, requires that all new and expansion of existing solid waste disposal facilities be consistent with its goals, policies, and siting criteria. Therefore, the SEIR should also include a discussion on how the proposed project will meet each of the Disposal Facility Siting criteria identified in the Siting Element (Chapter 6, Volume 1, and Appendix 6-A, Volume 3). Also, we recommend the inclusion of a condition of approval requiring the applicant to obtain a Finding of Conformance from the Task Force prior to obtaining a Solid Waste Facility Permit for the project.

13. Page 3-14, Table 3-3: Los Angeles County General Plan Policy Plan Consistency Analysis: The consistency analysis for the Source Reduction, Recycling, and Conversion of Waste to Energy policies should be expanded to

include a discussion on how the project will support and promote development of conversion technologies.

14. The traffic analysis conducted for this proposed project must be based on the total number of trucks entering the facility on a daily basis. This includes, but is not limited to, the requested 3,000 tons per day of solid waste and the additional estimated 1,600 to 2,800 tons per day of soil, green/wood waste, recyclables, and beneficial-use materials.

15. The SEIR should include an expanded discussion on the type of leachate treatment system proposed for the collected leachate (i.e., on- or off-site) and how the treated leachate and effluent will be finally managed.

16. The SEIR should include an expanded discussion on the fill sequencing plans detailing the sequences of fill operations and a map showing the appropriate phases of the filling process.

17. Please forward a copy of the draft permit conditions for our review prior to the Regional Planning Commission's consideration of the Conditional Use Permit for the proposed expansion of the facility.

18. The proposed Conditional Use Permit for the facility should incorporate provisions for the applicant to assist the County in its efforts to divert solid waste from landfill disposal, pursuant to the California Integrated Waste Management Act of 1989 (AB 939) as amended.

If you have any questions or require additional information, please contact Clarice Nash at (626) 458-5910.

CN:jmw
P:\CEQA\CLARICE\LLRCDSEIR

Appendix B

Traffic Impact Analysis

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT STUDY

LANCASTER LANDFILL & RECYCLING CENTER EIR

County of Los Angeles, California
October 31, 2005
(Revised October 2, 2006)

Prepared for:

Waste Management
Bradley Avenue Landfill
9227 Tujunga Avenue
Sun Valley, California 91352

LLG Ref. 2-05-2684

Prepared By:

Trissa (de Jesus) Allen, P.E.
Senior Transportation Engineer
& Keil D. Maberry, P.E.
Principal

Linscott, Law & Greenspan, Engineers
1580 Corporate Drive
Suite 122
Costa Mesa, CA 92626
714.641.1587 T
714.641.0139 F
www.llgengineers.com

TABLE OF CONTENTS

SECTION		PAGE
1.0	**INTRODUCTION**	**1**
2.0	**PROJECT DESCRIPTION**	**1**
3.0	**STUDY SCOPE**	**2**
4.0	**EXISTING CONDITIONS**	**4**
4.1	EXISTING STREET NETWORK	4
4.2	EXISTING TRAFFIC VOLUMES	6
4.3	EXISTING PEAK HOUR LEVELS OF SERVICE	9
4.4	EXISTING TRAFFIC CONDITIONS	9
5.0	**TRAFFIC PROJECTIONS**	**10**
5.1	PROJECT TRAFFIC VOLUMES	10
5.1.1	*Project Trip Generation Rates*	*12*
5.1.2	*Project Traffic Distribution and Assignment*	*15*
5.2	YEAR 2006 CUMULATIVE BASE TRAFFIC VOLUMES	20
5.3	YEAR 2006 CUMULATIVE + PROJECT TRAFFIC VOLUMES	20
6.0	**TRAFFIC IMPACT ANALYSIS**	**20**
6.1	SIGNIFICANT TRAFFIC IMPACT CRITERIA	33
6.2	YEAR 2006 CUMULATIVE BASE TRAFFIC CONDITIONS	33
6.3	YEAR 2006 CUMULATIVE + PROJECT TRAFFIC CONDITIONS	33
6.4	FREEWAY ANALYSIS	35
6.5	TRAFFIC SIGNAL WARRANTS	35
7.0	**SATURDAY ANALYSIS**	**35**
8.0	**PAVEMENT ANALYSIS**	**357**
9.0	**SUMMARY OF FINDINGS AND CONCLUSIONS**	**40**

APPENDICES

APPENDIX	
A.	Palmdale Landfill Information
B.	Traffic Count Data
C.	Level of Service Worksheets
D.	Traffic Signal Warrant Worksheets

LIST OF FIGURES

FIGURE #		PAGE
Figure 1:	Study Area	3
Figure 2:	Existing Roadway and Intersection Physical Characteristics	5
Figure 3:	Existing (Year 2005) AM Peak Hour Traffic Volumes	7
Figure 4:	Existing (Year 2005) PM Peak Hour Traffic Volumes	8
Figure 5:	Project Traffic Distribution Pattern (With Avenue F Extension)	18
Figure 6:	Project Traffic Distribution Pattern (Without Avenue F Extension)	19
Figure 7:	Project-Generated AM Peak Hour Traffic Volumes (With Avenue F Extension)	21
Figure 8:	Project-Generated PM Peak Hour Traffic Volumes (With Avenue F Extension)	22
Figure 9:	Project-Generated AM Peak Hour Traffic Volumes (Without Avenue F Extension)	23
Figure 10:	Project-Generated PM Peak Hour Traffic Volumes (Without Avenue F Extension)	24
Figure 11:	Cumulative Project Traffic Distribution Pattern	26
Figure 12:	Year 2006 Cumulative Base AM Peak Hour Traffic Volumes	27
Figure 13:	Year 2006 Cumulative Base PM Peak Hour Traffic Volumes	28
Figure 14:	Year 2006 Cumulative + Project AM Peak Hour Traffic Volumes (With Avenue F Extension)	29
Figure 15:	Year 2006 Cumulative + Project PM Peak Hour Traffic Volumes (With Avenue F Extension)	30
Figure 16:	Year 2006 Cumulative + Project AM Peak Hour Traffic Volumes (Without Avenue F Extension)	31
Figure 17:	Year 2006 Cumulative + Project PM Peak Hour Traffic Volumes (Without Avenue F Extension)	32

LIST OF TABLES

TABLE #		PAGE
Table 1:	Level of Service Definition for Signalized Intersections	10
Table 2:	Existing (Year 2005) Intersection Peak Hour Levels Of Service	11
Table 3A:	Tonnage Increase	13
Table 3B:	Peak Increase	14
Table 4:	Hourly Profile Of Inbound And Outbound Traffic	16
Table 5:	Project Trip Generation Estimates	17
Table 6:	Cumulative Project Trip Generation Rates And Estimates	25
Table 7:	Year 2006 Cumulative + Project Intersection Peak Hour Levels Of Service	34
Table 8:	Year 2006 SR-14 Freeway Mainline Levels Of Service	36
Table 9:	10-Year Conversion To Traffic Index (Ti)	38
Table 10:	Pavement Analysis	39

TRAFFIC IMPACT STUDY

LANCASTER LANDFILL & RECYCLING CENTER EIR

County of Los Angeles, California
October 31, 2005
(Revised October 2, 2006)

1.0 INTRODUCTION

This report documents the findings of a traffic impact study conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine and evaluate the traffic impacts associated with the proposed increase of Municipal Solid Waste (MSW) at the existing Lancaster Landfill and Recycling Center.

The report presents an inventory of existing characteristics and traffic volumes on roadways and intersections in the study area, forecasts vehicular traffic anticipated to be generated by the project, evaluates potential impacts of these project-generated trips on the surrounding street system, and outlines potential mitigation measures that address project-related traffic impacts. Additionally, the study analyzes the project's potential impacts on pavement integrity along key roadway segments adjoining the project site. The findings of this study will become part of the overall Environmental Impact Report (EIR) being prepared by Keeton Kreitzer Consulting for the project.

2.0 PROJECT DESCRIPTION

The project proposes to increase MSW operations from the current permitted maximum daily refuse inflow rate of 1,700 tons per day to a maximum of 3,000 tons per day at the existing Lancaster Landfill and Recycling Center. This plan to expand the MSW program will be implemented in the Year 2006. The project also includes tonnage increases from current operations related to greenwaste.

The project site exists at 600 Avenue F, located within an unincorporated portion of Los Angeles County, two miles northeast of the City of Lancaster limits. Lancaster Landfill's permitted refuse footprint is 209 acres. To date, approximately 78 acres have been utilized for waste disposal. The facility currently accepts approximately an average of 1,100 tons per day to a peak of 1,700 tons per day of MSW, and 340 (average) to 1,600 (peak) tons per day of recyclables, cover/contaminated soil, and greenwaste.

The increase in MSW permitted tonnage from 1,700 to 3,000 tons per day will be accommodated within the existing Lancaster Landfill site limits and facilities. The existing vehicular access for the site, which is located along Avenue F, will be maintained and used by existing traffic generated by the landfill, and by future, project-generated trips related to the expansion of MSW operations. In 2003, refuse collection/trucking operations, maintenance, and fueling facilities at Lancaster Landfill were relocated to the Palmdale Landfill. The relocation of these facilities has not changed the disposal activity at Lancaster Landfill, and therefore, no reduction in Lancaster Landfill's total daily traffic has been assumed as a result of transferring some services to the Palmdale Landfill. Information on the Palmdale Landfill is included in **Appendix A**.

A previous EIR was completed for Lancaster Landfill in 1997, which evaluated a western expansion of 62 acres (waste footprint of 50 acres) immediately to the west of the existing landfill, and an eastern expansion of 112 acres (waste footprint of 81 acres) located on the east side of 10th Street. The eastern expansion area will not be operational until the western expansion area is full. Both of these areas will also use Avenue F for access. This traffic study analyzes Year 2006 conditions and potential traffic impacts attributable to the expansion of MSW operations with a maximum of 3,000 tons per day of refuse until closure.

3.0 STUDY SCOPE

The scope for this study was developed in conjunction with Los Angeles County Department of Public Works (LACDPW) Traffic and Lighting Division, Caltrans, and the City of Lancaster. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach, and conform to LACDPW's *Traffic Impact Analysis Report Guidelines* (dated January 1, 1997), and *Scoping for Traffic Study* (dated June 6, 2005). The following traffic scenarios are addressed in the study:

- **Existing (2005) Conditions** - The analysis of existing traffic conditions is intended to provide a base of analysis for the remainder of the study. The existing conditions analysis includes an assessment of adjacent land use, streets, and highways in the area, current traffic volumes, and operating conditions.

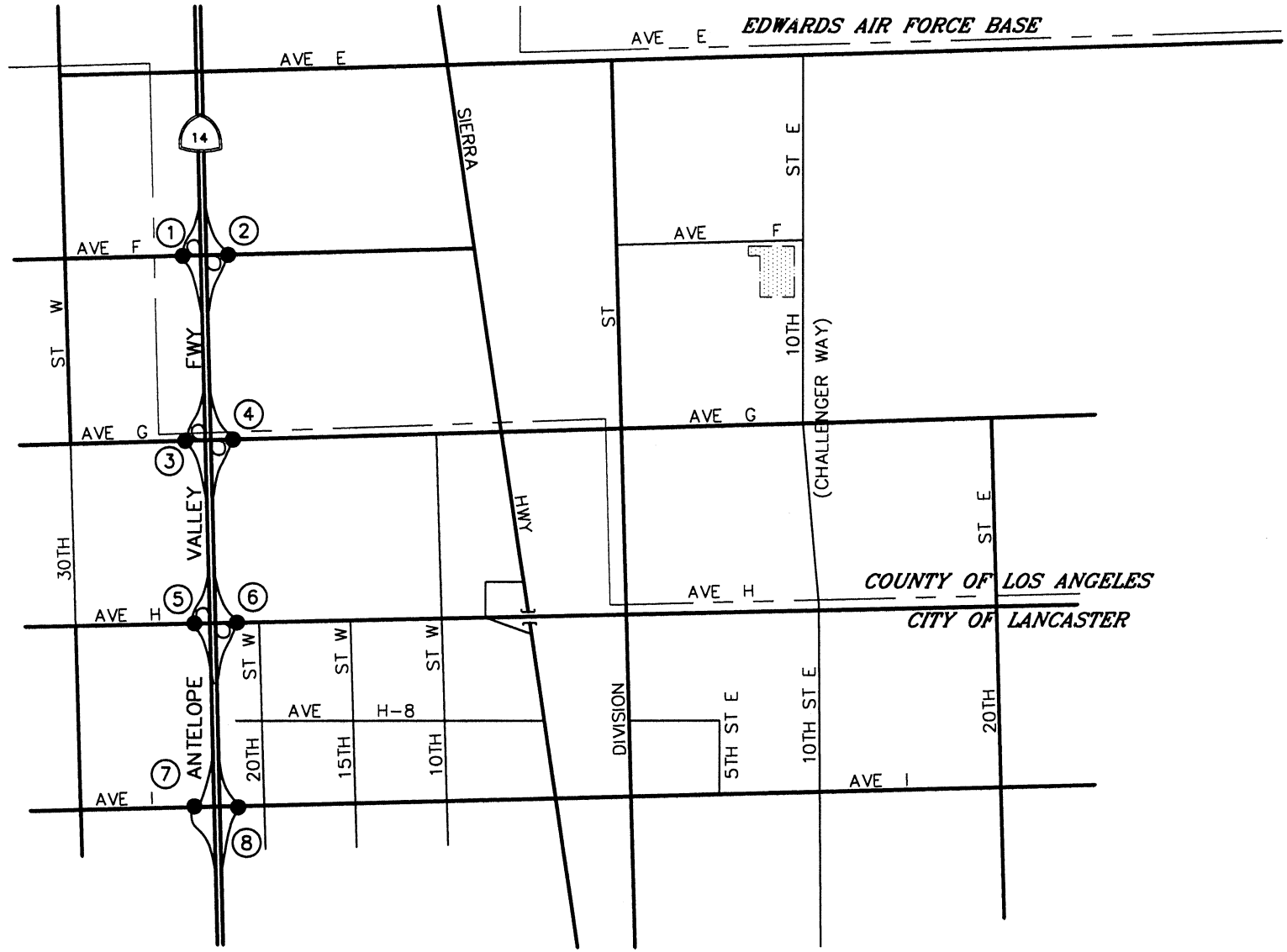
- **Year 2006 Cumulative Base Conditions** - This phase of analysis projects future traffic growth and operating conditions in the Year 2006 which could be expected to result from regional growth without the addition of project traffic.

- **Year 2006 Cumulative + Project Conditions** - This is an analysis of future traffic conditions in Year 2006 with the addition of project-generated traffic. Any significant traffic impacts will be identified, and potential mitigation measures recommended.

Two project scenarios are analyzed in this study. The first project scenario assumes the future extension of Avenue F between Sierra Highway and Division Street. This future improvement is included in the City of Lancaster's long-range planning effort. The second project scenario assumes that this roadway will not be extended.

As illustrated in **Figure 1**, a total of eight intersections were selected for detailed level of service analysis under each of the traffic scenarios identified above. The analysis is focused on assessing potential impacts during the AM and PM commute peak hours (between 7:00-9:00 AM, and 4:00-6:00 PM) during a typical weekday. The eight intersections analyzed in the study include:

1) Avenue F at SR-14 Southbound Ramps
2) Avenue F at SR-14 Northbound Ramps
3) Avenue G at SR-14 Southbound Ramps



n:\2600\2052684\dwg\2684f01.dwg LDP 11:49:33 08-04-2005 bhatanawin

LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

KEY

(6) = STUDY INTERSECTION

= PROJECT SITE (EXISTING LANDFILL)

FIGURE 1

STUDY AREA

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

4) Avenue G at SR-14 Northbound Ramps
5) Avenue H at SR-14 Southbound Ramps
6) Avenue H at SR-14 Northbound Ramps
7) Avenue I at SR-14 Southbound Ramps
8) Avenue I at SR-14 Northbound Ramps

Pavement integrity analysis was conducted at four roadway segments to determine if the project's increase in MSW would have a significant impact on pavement conditions. The four roadway segments include:

1) Avenue F between Division Street and 10th Street
2) Division Street between Avenue F and Avenue G
3) 10th Street between Avenue F and Avenue G
4) Avenue G between Division Street and 10th Street

Freeway mainline segment level of service analysis was performed at five locations, which include the following:

1) SR-14 Freeway north of Avenue F
2) SR-14 Freeway between Avenue F and Avenue G
3) SR-14 Freeway between Avenue G and Avenue H
4) SR-14 Freeway between Avenue H and Avenue I
5) SR-14 Freeway south of Avenue I

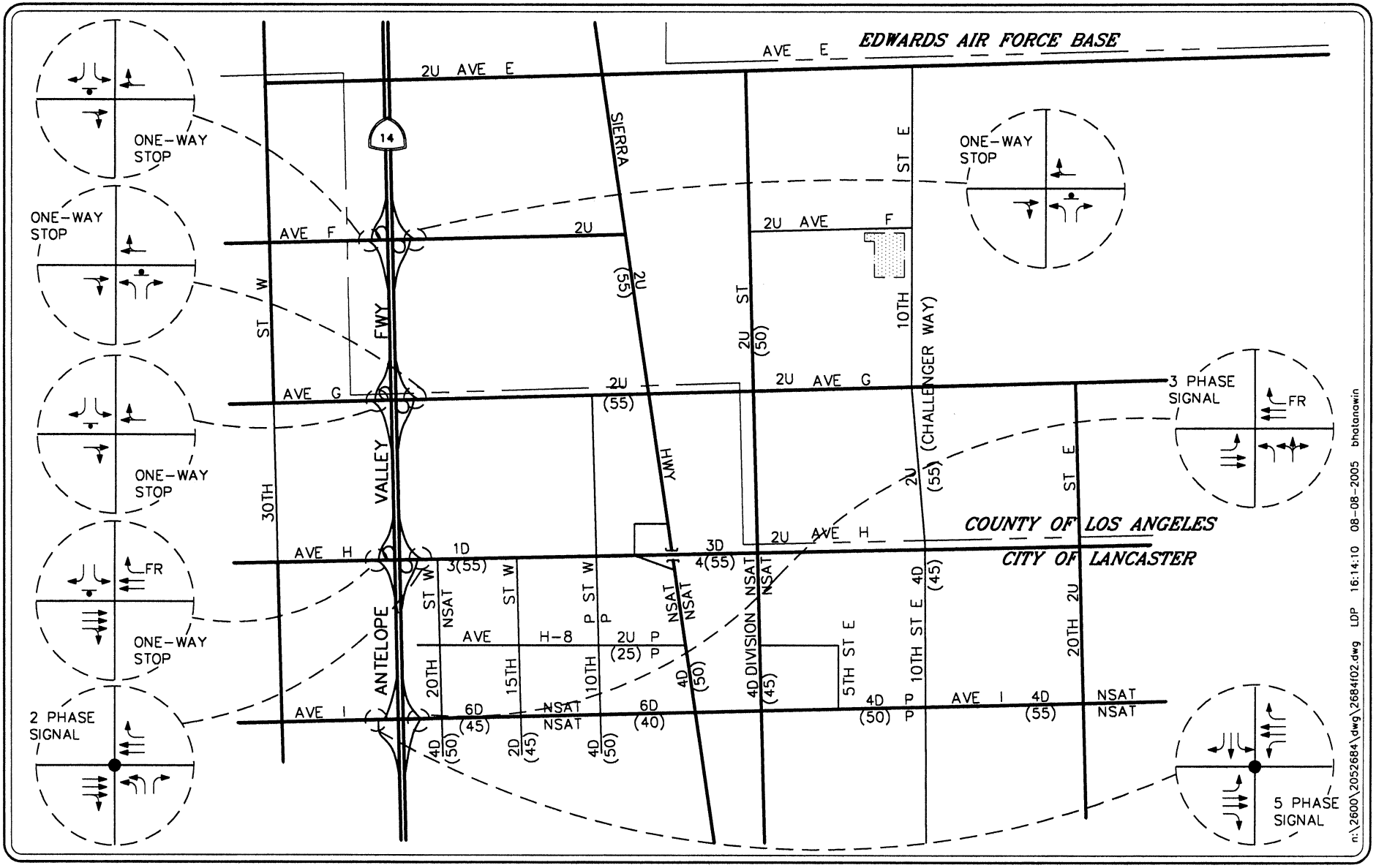
4.0 EXISTING CONDITIONS

The assessment of existing conditions includes an inventory of the street system, the traffic volumes using these facilities, and traffic operating conditions at analyzed locations.

4.1 Existing Street Network

A comprehensive inventory of the street system within the study area was undertaken to develop a detailed description of existing traffic conditions. **Figure 2** illustrates the existing physical characteristics of the streets, including lane configurations and traffic control at intersections, number of travel lanes, posted speed limits, and median types along roadways. The existing project site is currently accessible via Avenue F. The existing project driveway is located 2,450 feet west of the Avenue F @ 10th Street intersection, and is 40 feet wide.

Regional access to the study area is provided via the Antelope Valley Freeway (SR-14), which runs in the north-south direction approximately to the west of the project site. Within the study area, the Antelope Valley Freeway provides two southbound lanes and two northbound lanes. This freeway provides access to the project site via grade-separated interchanges, which exist at Avenue F, G, and H. The principal local network of streets serving the project includes Avenue F, Avenue G, Avenue H, Sierra Highway, Division Street, and 10th Street East (Challenger Way). The following discussion provides a brief synopsis of these key area streets.



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

- ← = APPROACH LANE ASSIGNMENT
- ● = TRAFFIC SIGNAL
- ⊸ = STOP SIGN
- (XX) = POSTED SPEED LIMIT (MPH)
- P = PARKING
- NSAT = NO STOPPING ANYTIME
- 2 = NUMBER OF TRAVEL LANES
- D = DIVIDED, U = UNDIVIDED
- ▒ = PROJECT SITE (EXISTING LANDFILL)

FIGURE 2

EXISTING ROADWAY AND INTERSECTION PHYSICAL CHARACTERISTICS

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

Avenue F is a two-lane discontinuous roadway, which forms the northern boundary of the project site. Currently, this roadway consists of two 11-foot lanes with undeveloped shoulders. Avenue F has a full interchange (half cloverleaf) with the Antelope Valley Freeway (SR-14). In the long-range planning effort, it is assumed that this roadway would be connected between Sierra Highway and Division Street.

Avenue G is a two-lane roadway located south of the project site, with 11-foot travel lanes, undeveloped shoulders, and a 55 mph speed limit. Avenue G also has a full (half cloverleaf) interchange at the Antelope Valley Freeway, providing regional connections to the north and south. Currently, this roadway is closed to through traffic west of the Antelope Valley Freeway due to construction.

Avenue H is grade-separated (flyover) at Sierra Highway, and has four eastbound lanes and three westbound lanes. East of the Antelope Valley Freeway, Avenue H consists of one westbound lane with undeveloped shoulders, and three eastbound lanes with developed shoulders. East of Division Street, Avenue H is a two-lane roadway with unpaved shoulders. Avenue H also has a full (half cloverleaf) interchange with the Antelope Valley Freeway. Between the Antelope Valley Freeway and Division Street, the posted speed limit is 55 mph.

Avenue I is a four-lane, east-west roadway. Between 30th Street West and 20th Street West, Avenue I provides four travel lanes. Between 20th Street West and 10th Street West, Avenue I widens to six travel lanes with a posted speed limit of 45 mph. East of Division Street, the posted speed limit is 50 mph, and Avenue I reverts to a four-lane roadway. East of 10th Street East, the posted speed limit is 55 mph.

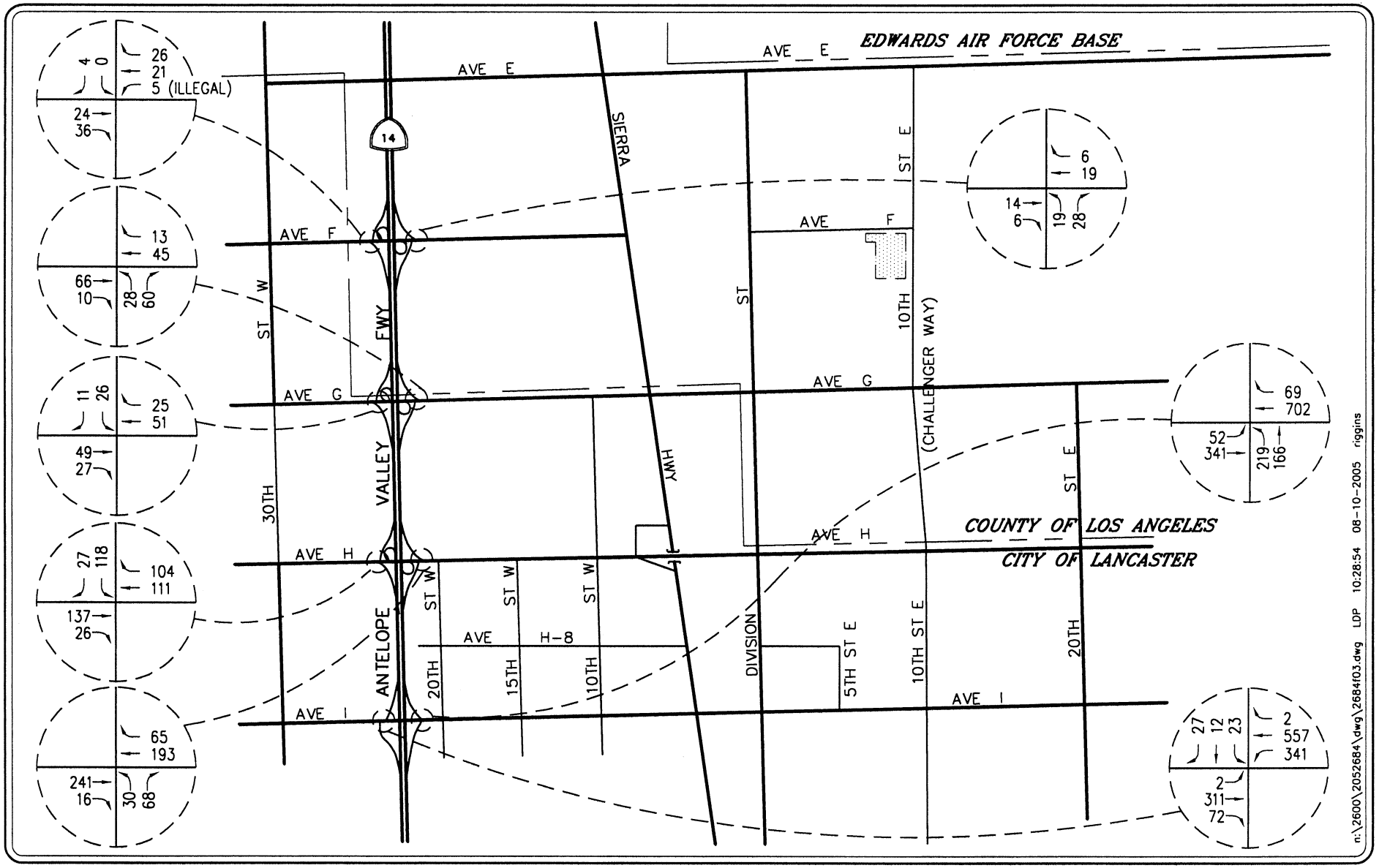
Sierra Highway is a two-lane, north-south roadway. Left-turn pockets are provided in both directions on Sierra Highway at Avenue G. There is a northbound left-turn pocket at Avenue G-12, which provides access to Avenue H from Sierra Highway. Sierra Highway has a posted speed limit of 55 mph. North of Avenue I, Sierra Highway is a four-lane roadway with a posted speed limit of 50 mph.

Division Street provides one lane in each direction, with undeveloped shoulders and a posted speed limit of 50 mph, north of Avenue H-8. Between Avenue I and Avenue H-8, there are two travel lanes in each direction, and a posted speed limit of 45 mph.

10th Street East (Challenger Way) has two 11-foot lanes and undeveloped shoulders in the vicinity of the project.

4.2 Existing Traffic Volumes

Traffic counts were collected on July 19, 2005 at each of the analyzed locations during the AM and PM peak time periods (count summaries prepared by Southland Car Counters are included in **Appendix B**). **Figures 3** and **4** illustrate the existing AM and PM peak hour traffic volumes, respectively, at the eight key intersections evaluated in this report.



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

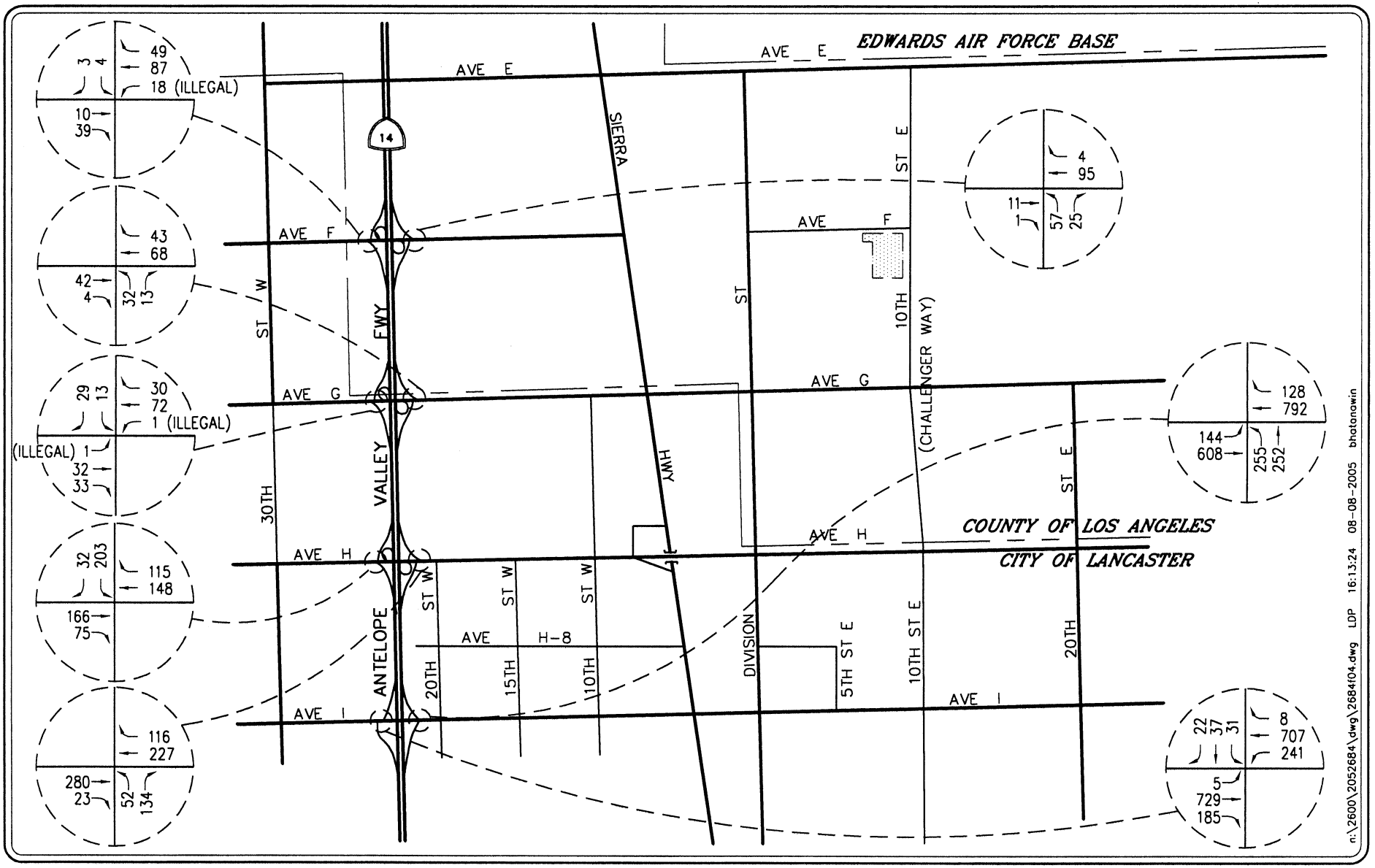
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 3

EXISTING (YEAR 2005) AM PEAK HOUR TRAFFIC VOLUMES

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

PROJECT SITE

FIGURE 4

EXISTING (YEAR 2005) PM PEAK HOUR TRAFFIC VOLUMES

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

4.3 Existing Peak Hour Levels of Service

Level of Service (LOS) qualitatively measures the operating conditions within a traffic system and how drivers and passengers perceive these conditions. Level of service ranges from LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum satisfactory service level in urban areas.

Based upon LACDPW guidelines, the *Intersection Capacity Utilization* (ICU) methodology was used to determine the volume-to-capacity relationships for signalized intersections (based upon the individual volume-to-capacity ratios for key conflicting traffic movements), and corresponding level of service. Five of the eight key intersections are currently stop-controlled/unsignalized, and the three intersections of Avenue H @ SR-14 northbound ramps, Avenue I @ SR-14 southbound ramps, and Avenue I @ SR-14 northbound ramps, are signalized. Per LACDPW Traffic and Lighting Division staff's direction, all eight key intersections were evaluated as signalized intersections using the ICU level of service methodology.

By using 1,600 vehicles per hour per lane (vphpl) as the practical capacity for through lanes, left-turn, and right-turn lanes, and a dual left-turn lane capacity of 2,880 vehicles per hour for the two lanes, the ICU method directly relates traffic demand to the available capacity. The resulting ICU numerical value represents the greatest green time requirements plus a 10% allowance (additional ICU value of 0.10) for clearance intervals for the entire intersection. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing. Level of service definitions for signalized intersections are summarized in **Table 1** on the next page.

Based upon the ICU level of service methodology described, the existing peak hour traffic volumes presented in **Figures 3** and **4** were used in conjunction with existing lane configurations illustrated in **Figure 2** to determine the current traffic operating conditions at the eight key intersections. **Appendix C** contains the detailed level of service worksheets.

4.4 Existing Traffic Conditions

Table 2 summarizes the existing peak hour levels of service at the eight study intersections. As shown, all of the intersections currently operate at satisfactory levels of service (i.e., LOS D or better) during the AM and PM peak hours.

To evaluate the need for traffic signals at the five stop-controlled intersections, traffic signal warrant analysis was performed. Based upon the traffic signal warrants contained in the *Traffic Manual* (Caltrans, July 1996) and the *Manual on Uniform Traffic Control Devices* (U.S. Department of Transportation, Federal Highway Administration, March 1986), it was determined that none of the five stop-controlled intersections warrants a traffic signal.

TABLE 1

LEVEL OF SERVICE DEFINITION FOR SIGNALIZED INTERSECTIONS

Lancaster Landfill, County of Los Angeles

Level of Service (LOS)	Intersection Capacity Utilization Value (ICU)	Definition
A	≤ 0.60	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.61 - 0.70	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.71 - 0.80	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.81 – 0.90	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.91 – 1.00	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.00	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

Source: Highway Capacity Manual, Transportation Research Board

5.0 TRAFFIC PROJECTIONS

In order to evaluate the potential traffic impacts of the proposed project, the amount of traffic that could be generated (i.e., project traffic generation), and future traffic volumes on the surrounding street system (i.e., Cumulative Base forecasts), need to be estimated. It is necessary to develop these projections in order to determine any potential traffic impacts that the project-generated traffic may have on the adjacent circulation system. This is done through a comparison of Cumulative Base conditions (representing future conditions without the proposed project) with Cumulative plus Project conditions (representing future conditions with the project).

5.1 Project Traffic Volumes

To estimate Lancaster Landfill's tripmaking characteristics in accommodating an increase of MSW to a maximum of 3,000 tons per day, a multi-step process has been utilized. The first step is project traffic generation, which estimates the total arriving and departing traffic at the project site on a peak hour and daily basis. The second step of the forecasting process is project traffic distribution, which involves the development of a geographic trip distribution pattern that identifies the origins/destinations of project traffic. The third step is project traffic assignment, by which project-generated trips are allocated on the street system.

TABLE 2
EXISTING (YEAR 2005)
INTERSECTION PEAK HOUR LEVELS OF SERVICE
Lancaster Landfill, County of Los Angeles

Key Intersections [a]	Peak Hour	ICU	LOS
1) Avenue F @	AM	0.14	A
SR-14 SB Ramps	PM	0.20	A
2) Avenue F @	AM	0.13	A
SR-14 NB Ramps	PM	0.20	A
3) Avenue G @	AM	0.16	A
SR-14 SB Ramps	PM	0.18	A
4) Avenue G @	AM	0.19	A
SR-14 NB Ramps	PM	0.19	A
5) Avenue H @	AM	0.21	A
SR-14 SB Ramps	PM	0.28	A
6) Avenue H @	AM	0.20	A
SR-14 NB Ramps	PM	0.26	A
7) Avenue I @	AM	0.43	A
SR-14 SB Ramps	PM	0.50	A
8) Avenue I @	AM	0.49	A
SR-14 NB Ramps	PM	0.72	C

Note:

[a] All key intersections are currently unsignalized, except for Avenue H @ SR-14 NB Ramps, Avenue I @ SR-14 NB Ramps, and Avenue I @ SR-14 SB Ramps that are signalized. Based upon LACDPW Traffic & Lighting Division staff's direction, all key intersections were analyzed as if they were signalized.

5.1.1 *Project Trip Generation Rates*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and equations used in the traffic forecasting procedure are typically found in the Seventh Edition of *Trip Generation,* published by the Institute of Transportation Engineers (ITE) [Washington, D.C., 2003]. However, this manual does not include trip rates specific to landfills and/or recycling centers. Therefore, the trip generation potential for the proposed MSW tonnage increase at Lancaster Landfill was estimated based upon the anticipated, corresponding net change in truck trips (for waste transfer) and passenger car trips (for employees and visitors). The net additional truck trips were converted to passenger car equivalents in estimating the project's tripmaking potential.

The project proposes to increase MSW operations at the existing Lancaster Landfill site from the current average daily inflow rate of approximately 1,100 tons per day to 3,000 tons per day of refuse by the Year 2006.

Table 3A presents a summary of the average tonnage increase based upon operational data provided by Waste Management (the landfill operators) for existing conditions, and future conditions with the implementation of the 3,000 tons per day maximum for MSW. **Table 3A** provides the basis for developing the project's trip generation estimates.

Column [1] and Column [2] of **Table 3A** present the average tons and loads based upon actual counts performed by Waste Management at Lancaster Landfill between January 1, 2003 and March 1, 2003 (corresponding to a period of 51 days of operation). Columns [3], [4], and [5] were derived from this existing average baseline of tonnage and loads. Column [4] shows that the existing facility currently accepts averages of 1,122 tons per day of MSW, and 344 tons per day of recyclables, cover/contaminated soil, and greenwaste. Column [6] indicates the maximum of 3,000 tons per day of MSW, and shows 794 tons per day average tonnage for recyclables in the future.

As indicated in **Table 3A**, the MSW and recyclable tonnage increase is expected to result in a net addition of 97 trucks (more transfer trailers, fewer other truck types). This net addition of 97 trucks provided the basis for the project trip generation and project impact evaluation in this study.

Table 3B summarizes the peak tonnage for existing and future conditions at Lancaster Landfill. Column [1] of **Table 3B** indicates the existing, permitted tonnage of 1,700 tons per day of MSW and the current, approximate peak tonnage of 1,608 tons per day of recyclables, cover/contaminated soil, and greenwaste. Column [4] indicates that, in the future, the maximum of 3,000 tons per day of MSW, and a peak tonnage of 2,108 tons per day of recyclables/soil/greenwaste are anticipated. Column [6] shows that the net increase of 1,300 tons per day of MSW and 500 tons per day of recyclables will be accommodated by transfer trailers (larger capacity trucks with 21.6 tons per load), and that fewer other truck types (smaller capacity trucks with 5.2 tons per load) will be used in the future. Therefore, based upon a comparison of future peak tonnage against existing peak tonnage, there will be a net increase of 72 loads per day (or trucks) for MSW and recyclables/soil/greenwaste, as Column [7] indicates.

LINSCOTT LAW & GREENSPAN engineers

TABLE 3A
AVERAGE TONNAGE
Lancaster Landfill, County of Los Angeles

DESCRIPTION	EXISTING OPERATIONS [a]					FUTURE [b]		NET CHANGE	
	Tons [1]	Loads [2]	Tons/Load ([1] / [2]) [3]	Tons/Day ([1] / 51 days) [4]	Loads/Day ([2] / 51 days) [5]	Tons/Day [6]	Loads/Day ([6] / [3]) [7]	Tons/Day ([6] - [4]) [8]	Loads/Day ([7] - [5]) [9]
Municipal Solid Waste (MSW)									
MSW in Transfer Trailers	23,465	1,085	21.6	460	21	2,370	110	**1,910**	**89**
MSW in Other Trucks	33,159	6,350	5.2	650	125	620	119	**-30**	**-6**
MSW in Pickups/Cars	612	2,040	0.3	12	40	10	33	**-2**	**-7**
Sub-total:	**57,236**	**9,475**	**-**	**1,122**	**186**	**3,000**	**262**	**1,878**	**76**
Recycling									
Recyclables in Trucks	3,010	707	4.3	59	14	59	14	**0**	**0**
Cover Soil in Trucks	3,081	323	9.5	60	6	60	6	**0**	**0**
Contaminated Soil in Trucks	8,992	359	25.0	176	7	176	7	**0**	**0**
Greenwaste in Direct Haul Trucks	2,400	883	2.7	47	17	47	17	**0**	**0**
Greenwaste in Transfer Trailers	0	0	21.6	0	0	450	21	**450**	**21**
Other Recyclables in Trucks	123	106	1.2	2	2	2	2	**0**	**0**
Sub-Total:	**17,606**	**2,378**	**-**	**344**	**46**	**794**	**67**	**450**	**21**
TOTAL	**74,842**	**11,853**	**-**	**1,466**	**232**	**3,794**	**329**	**2,328**	**97**

Notes:

[a] Average tonnage and load data are based on counts performed by Waste Management at Lancaster Landfill between January 1, 2003 and March 1, 2003 (corresponds to a period of 51 days of operations).

[b] Future tonnage (i.e., tons per day) projected by Waste Management.

LINSCOTT LAW & GREENSPAN engineers

TABLE 3B
PEAK TONNAGE
Lancaster Landfill, County of Los Angeles

DESCRIPTION	EXISTING OPERATIONS [a] Tons/Day [1]	Tons/Load [2]	Loads/Day ([1] / [2]) [3]	FUTURE [b] Tons/Day [4]	Loads/Day [5]	NET CHANGE Tons/Day ([4] - [1]) [6]	Loads/Day ([5] - [3]) [7]
Municipal Solid Waste (MSW)							
MSW in Transfer Trailers	1,038	21.6	48	2,370	110	**1,332**	**62**
MSW in Other Trucks	650	5.2	125	620	119	**-30**	**-6**
MSW in Pickups/Cars	12	0.3	40	10	33	**-2**	**-7**
Sub-total:	**1,700**	-	**213**	**3,000**	**262**	**1,300**	**49**
Recycling							
Recyclables in Trucks	59	4.3	14	59	14	**0**	**0**
Cover Soil in Trucks	250	9.5	26	250	26	**0**	**0**
Contaminated Soil in Trucks	1,250	25.0	50	1,250	50	**0**	**0**
Greenwaste in Direct Haul Trucks	47	2.7	17	47	17	**0**	**0**
Greenwaste in Transfer Trailers	0	21.6	0	500	23	**500**	**23**
Other Recyclables in Trucks	2	1.2	2	2	2	**0**	**0**
Sub-Total:	**1,608**	-	**109**	**2,108**	**132**	**500**	**23**
TOTAL	**3,308**	-	**322**	**5,108**	**394**	**1,800**	**72**

Notes:

[a] Peak tonnage (i.e., tons per day) estimated by Waste Management based on counts performed between January 1, 2003 and March 1, 2003 (corresponds to a period of 51 days of operations). Tons/Load ratios based on **Table 3A**.

[b] Future tonnage (i.e., tons per day) projected by Waste Management.

Since **Table 3B** results in fewer additional trucks for the future (i.e., 72-truck increase per **Table 3B** versus a 97-truck increase per **Table 3A**), and in order to evaluate a worst-case scenario of project impacts, this study used the 97-truck increase presented in **Table 3A** as the basis for estimating the project trip generation. As a result, the maximum vehicles per day (VPD) that will access the facility is 419 vehicles (322 VPD peak existing plus 97 VPD peak new).

Based upon data provided by Waste Management, **Table 4** summarizes the hourly profile of inbound and outbound traffic at the site, and shows that peak activity at the facility occurs outside of the typical AM and PM commute peak hours of adjacent street traffic.

Table 5 presents the trip generation estimates for the project, and indicates that the proposed increase in MSW and recyclables is expected to generate 408 daily trips, of which 65 trips (47 inbound, 18 outbound) would occur during the AM peak hour, and 53 trips (18 inbound, 35 outbound) would occur during the PM peak hour.

The trip generation estimates was calculated by converting all truck trips to Passenger Car Equivalents (PCE). A PCE is defined as the number of passenger cars a single heavy vehicle of specified type displaces in a given traffic stream. All truck trips were multiplied by 2.0 in order to convert them to PCEs. This adjustment is made in accordance with LACDPW Traffic and Lighting Division staff's direction, and produces more conservative estimates of project trip generation. All employee and visitor trips were assumed as passenger cars.

The detailed calculations and assumptions that provided the basis for developing the project trip generation estimates are provided on the bottom portion of **Table 5**. The assumptions relate to tripmaking characteristics during the AM and PM peak hours that are based upon operational data at the existing Lancaster Landfill facility.

5.1.2 *Project Traffic Distribution and Assignment*

The general, directional traffic distribution patterns for the proposed project are illustrated in **Figures 5** and **6**, with the Avenue F extension, and without the Avenue F extension, respectively.

Project traffic volumes entering and exiting the site have been distributed and assigned to the adjacent street system based upon the following considerations:

1) the site's proximity to major traffic carriers (SR-14 Freeway)

2) expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals

3) ingress/egress availability at the project site

4) truck fixed-route information provided by Waste Management relating to service areas for the project, which are Lancaster/Palmdale, Quartz Hill, Antelope Acres, Lake Los Angeles, Pear Blossom, Edwards Air Force Base (EAFB), Acton, Wrightwood, and Gorman

LINSCOTT LAW & GREENSPAN engineers

TABLE 4
PROJECTED HOURLY PROFILE OF INBOUND AND OUTBOUND TRAFFIC
Lancaster Landfill, County of Los Angeles

HOUR	INBOUND							OUTBOUND						
	Trucks	Transfer	Grnwaste	Recycle	Employees	TOTAL	%	Trucks	Transfer	Grnwaste	Recycle	Employees	TOTAL	%
0500-0600	0	0	0	0	4	4	*1%*	0	0	0	0	0	0	*0%*
0600-0700	3	0	0	0	0	3	*1%*	3	0	0	0	0	3	*1%*
0700-0800	5	0	0	0	4	9	*3%*	4	0	0	0	0	4	*1%*
0800-0900	8	20	1	22	0	51	*15%*	6	10	1	11	0	28	*8%*
0900-1000	8	24	2	14	2	50	*15%*	10	24	1	14	0	49	*14%*
1000-1100	8	0	1	4	0	13	*4%*	8	10	1	7	0	26	*8%*
1100-1200	8	0	1	4	1	14	*4%*	8	0	2	5	0	15	*4%*
1200-1300	9	18	2	14	0	43	*13%*	8	10	2	9	0	29	*9%*
1300-1400	10	24	3	14	3	54	*16%*	10	20	2	15	0	47	*14%*
1400-1500	8	0	1	4	0	13	*4%*	9	12	2	8	4	35	*10%*
1500-1600	8	0	3	13	2	26	*8%*	8	0	2	13	0	23	*7%*
1600-1700	5	17	2	4	0	28	*8%*	6	10	2	7	6	31	*9%*
1700-1800	6	24	0	0	0	30	*9%*	4	19	1	4	0	28	*8%*
1800-1900	0	0	0	0	0	0	*0%*	2	12	0	0	6	20	*6%*
1900-2000	0	0	0	0	0	0	*0%*	0	0	0	0	0	0	*0%*
Total	86	127	16	93	16	338	-	86	127	16	93	16	338	-

LINSCOTT LAW & GREENSPAN engineers

TABLE 5
PROJECT TRIP GENERATION ESTIMATES
Lancaster Landfill, County of Los Angeles

Project Component	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Truck-related PCE Trips	388	29	16	45	16	17	33
Employee and Visitor Trips	20	18	2	20	2	18	20
NET ADDITIONAL TRIPS	**408**	**47**	**18**	**65**	**18**	**35**	**53**

CALCULATION:

NET ADDITIONAL TRUCK TRIPS CONVERTED TO PASSENGER CAR EQUIVALENTS

Step 1: Net No. of Trucks = 97 trucks (per net increase in loads/day in **Table 3A**)

Step 2: Daily (PCE) Trips = (97 veh/day) X (2 trips/veh) X (2.0 PCE factor)
= (194 truck trips/day) X (2.0 PCE factor)
= 388 PCE trips per day

Step 3: AM Peak Hour (PCE) Trips = [(194 net new PCEs) X 15% inbound per **Table 4**]
+ [(194 net new PCEs) X 8% outbound per **Table 4**]
= 45 PCE trips per hour
Inbound = 29 PCE trips per hour
Outbound = 16 PCE trips per hour

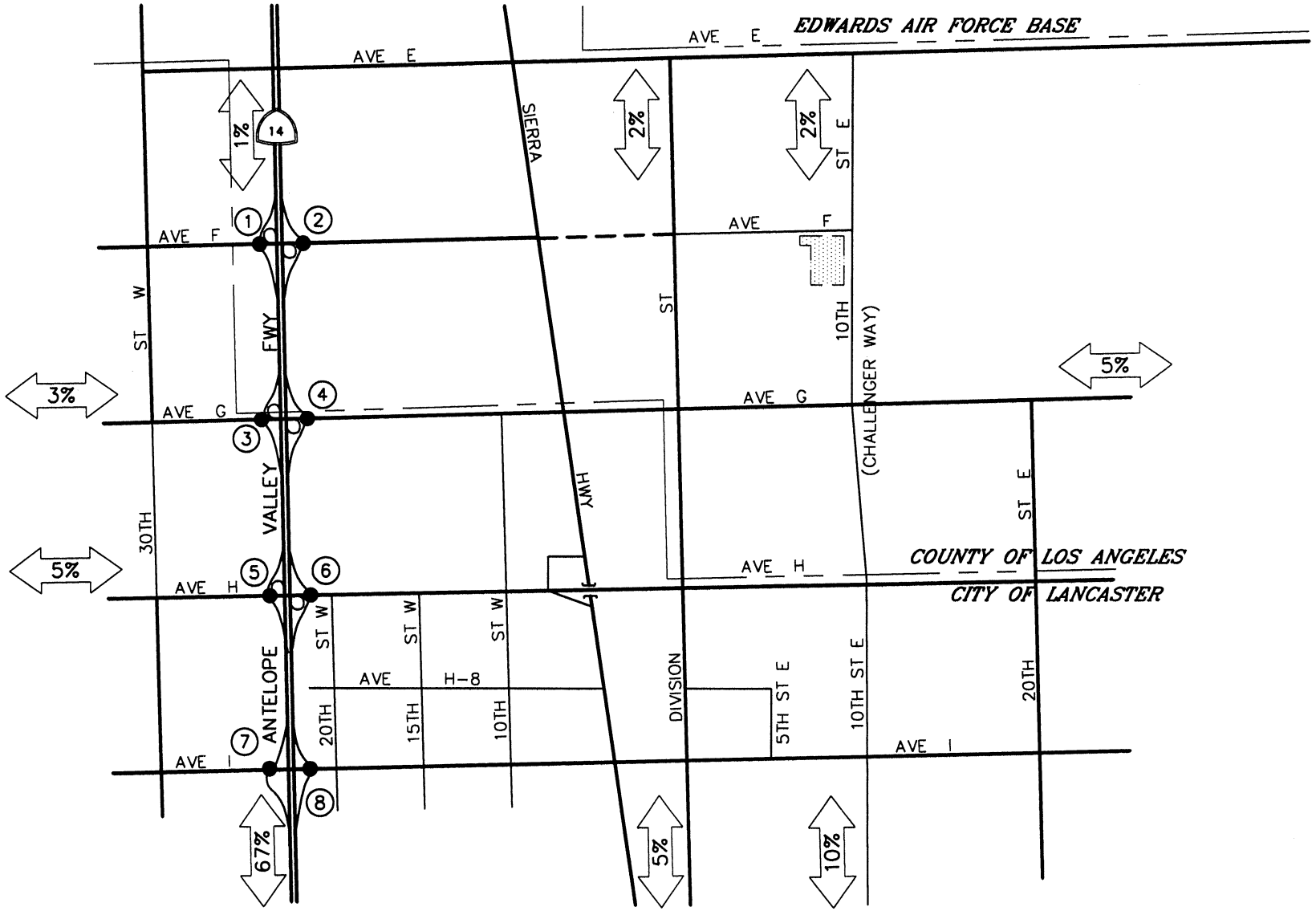
Step 4: PM Peak Hour (PCE) Trips = [(194 net new PCEs) X 8% inbound per **Table 4**]
+ [(194 net new PCEs) X 9% outbound per **Table 4**]
= 33 PCE trips per hour
Inbound = 16 PCE trips per hour
Outbound = 17 PCE trips per hour

NET ADDITIONAL EMPLOYEE & VISITOR TRIPS

Step 1: Daily Trips = (5 employee + 5 visitor vehicles) X (2 trips/day)
= 20 trips per day

Step 2: AM Peak Hour Trips = (20 trips/day) X (100%)
= 20 trips per hour
Inbound = 18 trips per hour
Outbound = 2 trips per hour

Step 3: PM Peak Hour Trips = (20 trips/day) X (100%)
= 20 trips per hour
Inbound = 2 trips per hour
Outbound = 18 trips per hour



n:\2600\2052684\dwg\2684105a.dwg LDP 17:56:04 08-18-2005 green

LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

6 = ANALYZED INTERSECTION

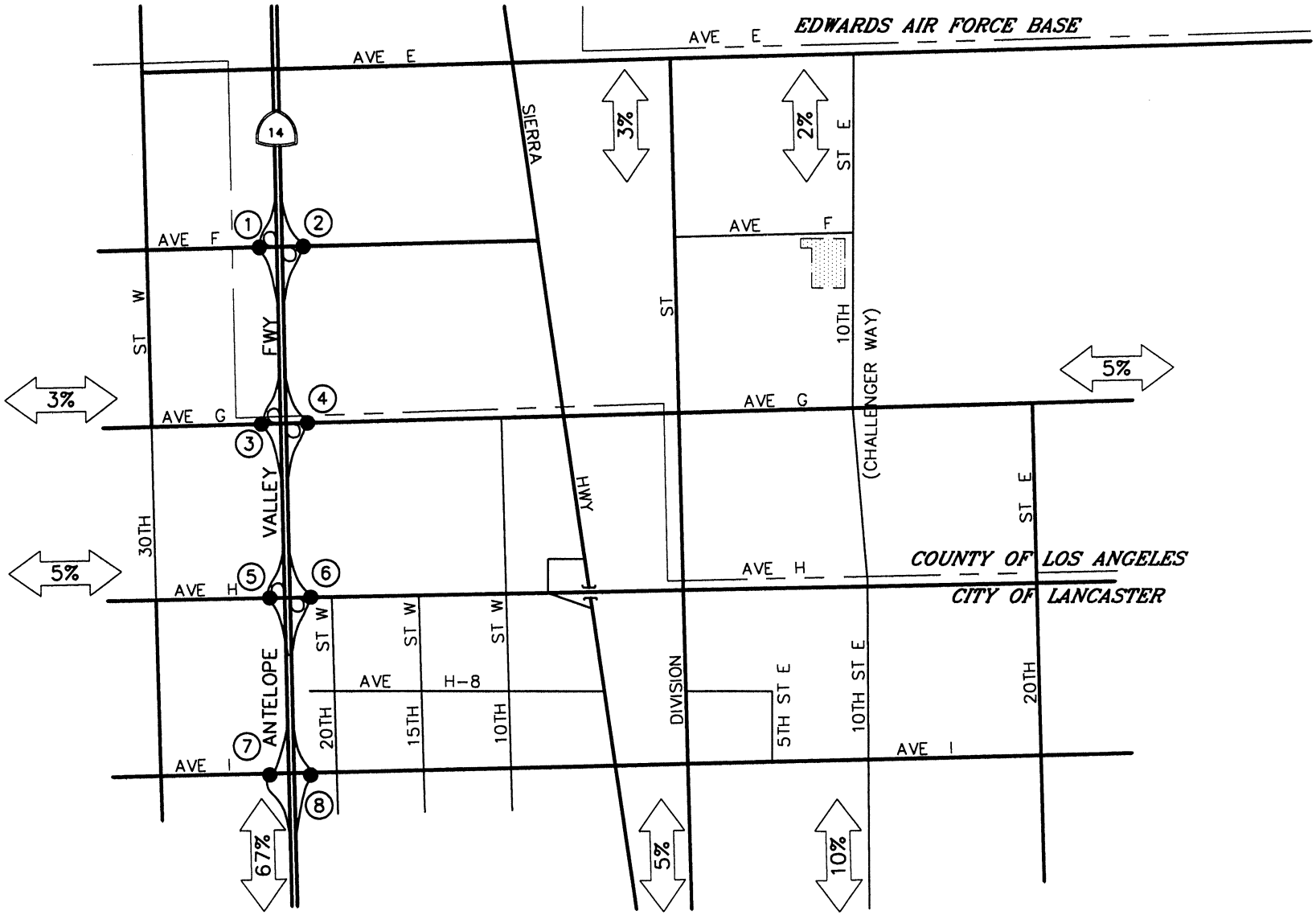
= PROJECT SITE (EXISTING LANDFILL)

= AVENUE F EXTENSION

FIGURE 5

PROJECT TRAFFIC DISTRIBUTION PATTERN (WITH AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



n:\2600\2052684\dwg\2684106a.dwg LDP 17:57:24 08-18-2005 green

LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

⑥ = ANALYZED INTERSECTION

= PROJECT SITE (EXISTING LANDFILL)

FIGURE 6

PROJECT TRAFFIC DISTRIBUTION PATTERN (WITHOUT AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

The traffic generated by the proposed project was assigned to the local street network using the trip generation estimates and the distribution patterns described above. **Figures 7** and **8** illustrate the resulting project-generated traffic volumes at the analyzed intersections, assuming the Avenue F extension, for the AM and PM peak hour, respectively. **Figures 9** and **10** depict the project-generated trips, without the Avenue F extension, for the AM and PM peak hour, respectively.

5.2 Year 2006 Cumulative Base Traffic Volumes

Based upon LACDPW Traffic and Lighting Division staff's direction, the background traffic in the study area has been estimated to increase at a rate of 3.8 percent per year. Future increases in background traffic due to regional development are expected to continue at the same rate. By assuming that the project is to be completed in the Year 2006, the existing traffic volumes were increased by 3.8 percent to reflect area wide regional growth in traffic.

The Regional Planning Department of Los Angeles County, and the City of Lancaster were contacted to compile a list of cumulative projects. The research produced five related projects located within the study area (i.e., City of Lancaster), which are presented in **Table 6**. All five related projects are single-family residential developments, and are expected to be built and occupied by the Year 2006. **Table 6** summarizes the trip generation rates and estimates for the cumulative projects. As shown, the five related projects are expected to generate 6,404 daily trips, 461 AM peak hour trips, and 621 PM peak hour trips. These cumulative project trips were assigned to the street system according to the cumulative project traffic distribution pattern illustrated on **Figure 11**, which is generally based on trip distribution data in the *Los Angeles County Congestion Management Program* (CMP).

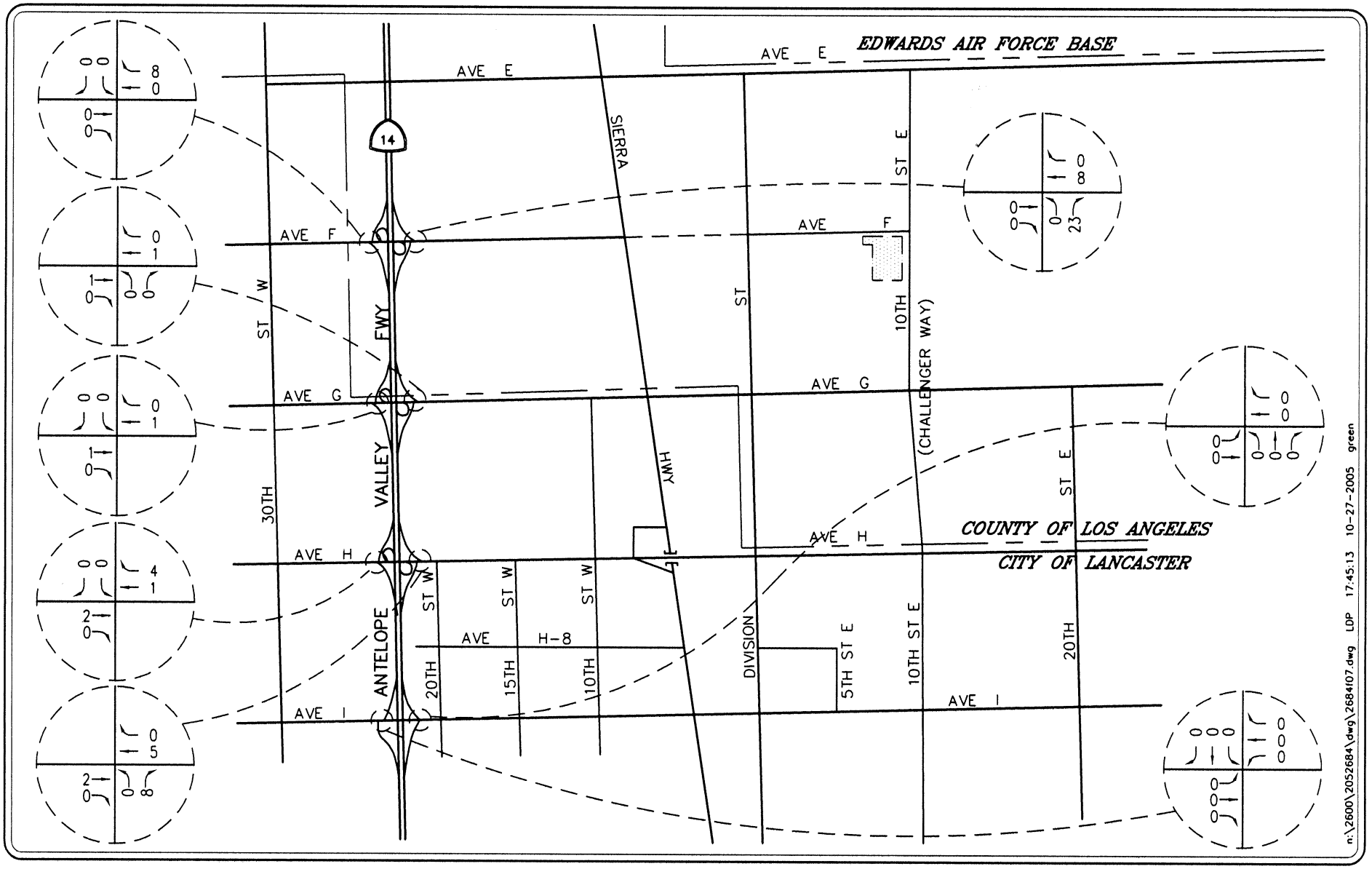
The cumulative project traffic volumes were added to the existing traffic volumes (increased by ambient growth) to develop the Year 2006 Cumulative Base traffic forecasts. The resulting Year 2006 Cumulative Base traffic volumes are illustrated on **Figures 12** and **13** during the AM and PM peak hour, respectively.

5.3 Year 2006 Cumulative + Project Traffic Volumes

The estimates of project-generated traffic volumes were added to the Year 2006 Cumulative Base forecasts to develop traffic projections for the Year 2006 Cumulative + Project scenario. The resulting traffic volumes, with the Avenue F extension, are illustrated on **Figures 14** and **15** for the AM and PM peak hour, respectively. **Figures 16** and **17** depict Year 2006 Cumulative + Project traffic volumes, without the Avenue F extension, for the AM and PM peak hour, respectively.

6.0 Traffic Impact Analysis

This section presents a comparison of conditions with and without the project at each analyzed intersection to determine the incremental effect of the proposed project on Year 2006 traffic conditions. Detailed calculations of the intersection levels of service are included in **Appendix C**.



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

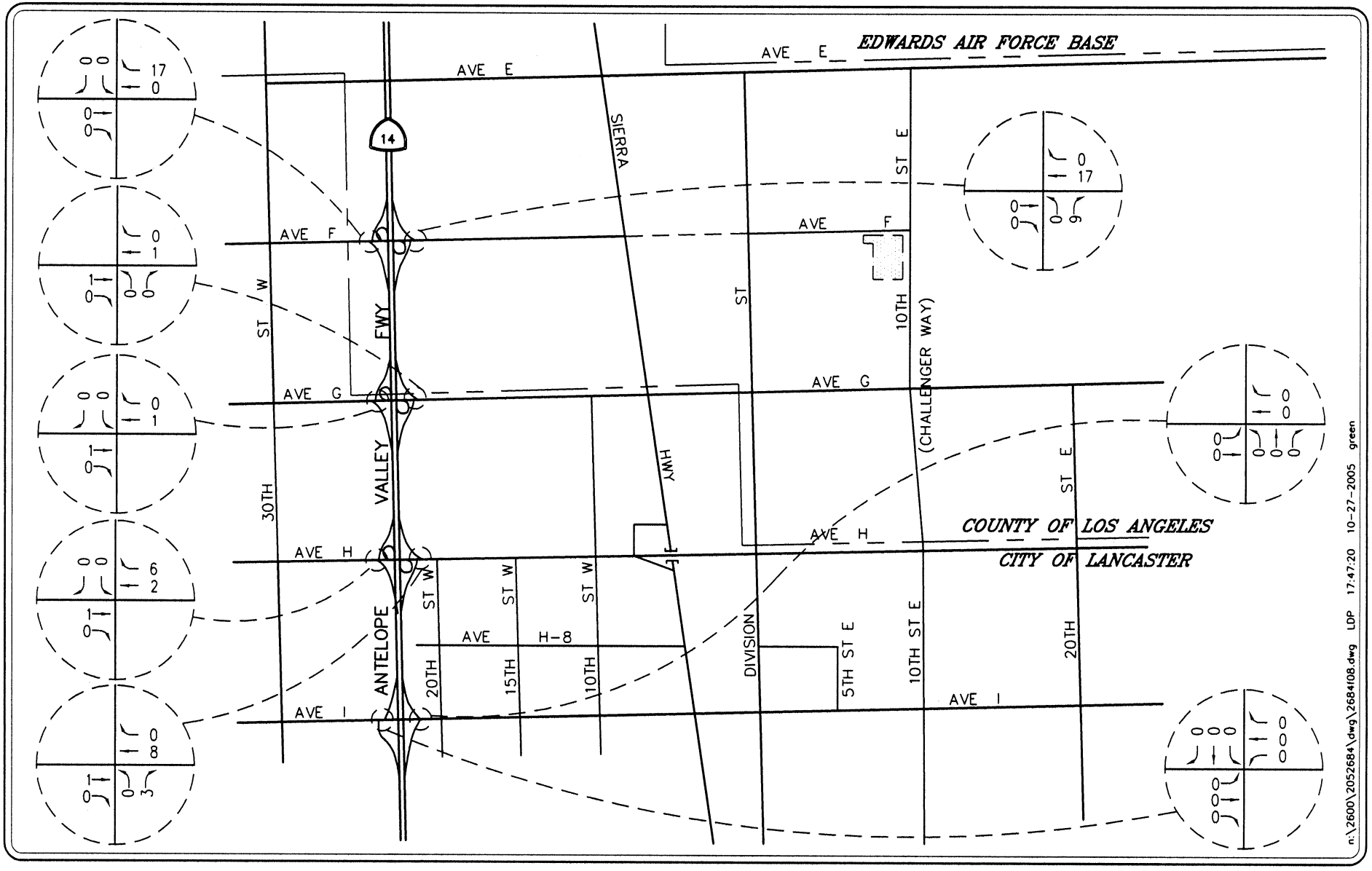
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 7

PROJECT-GENERATED AM PEAK HOUR TRAFFIC VOLUMES (WITH AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

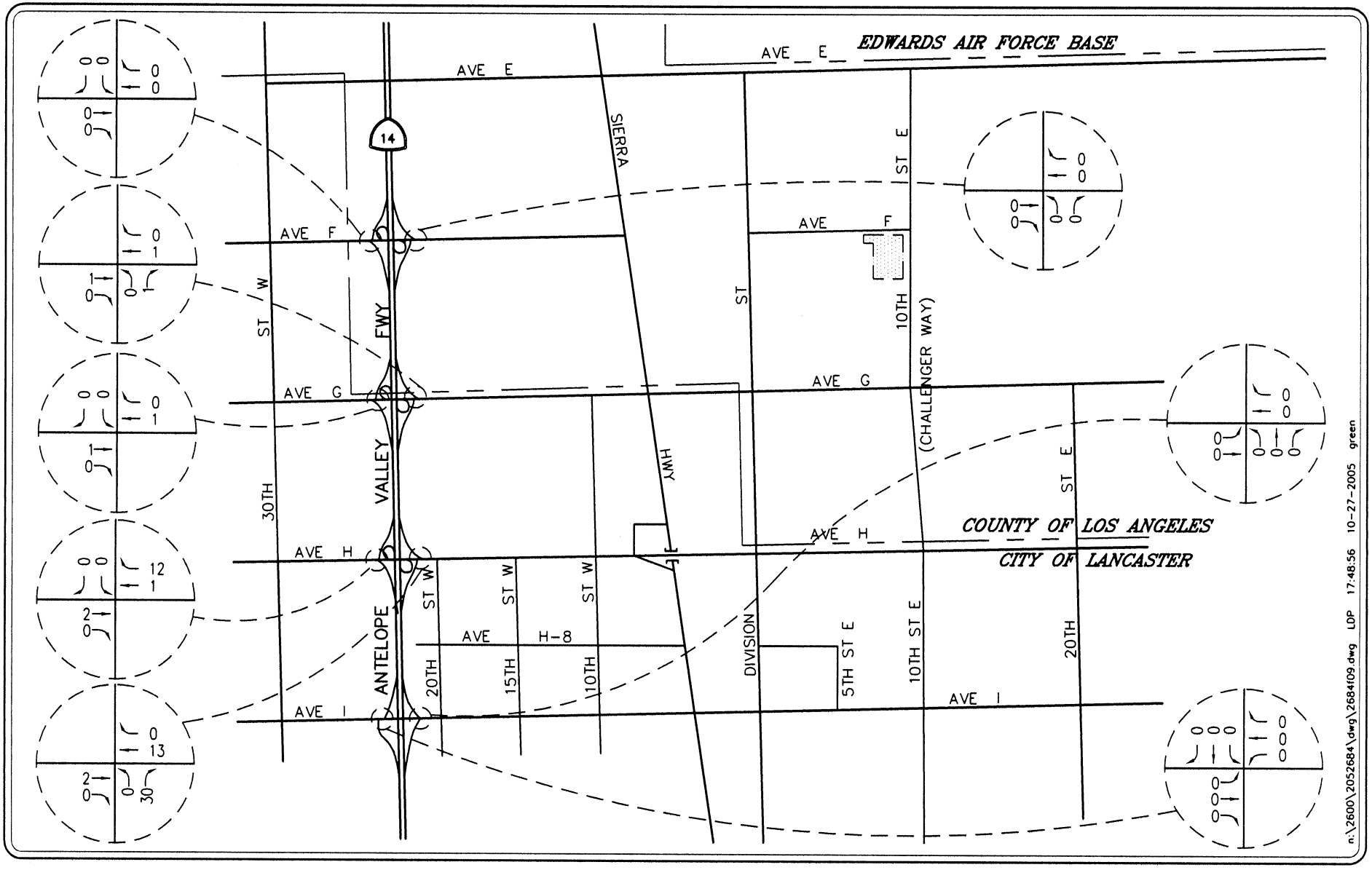
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 8

PROJECT-GENERATED PM PEAK HOUR TRAFFIC VOLUMES (WITH AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

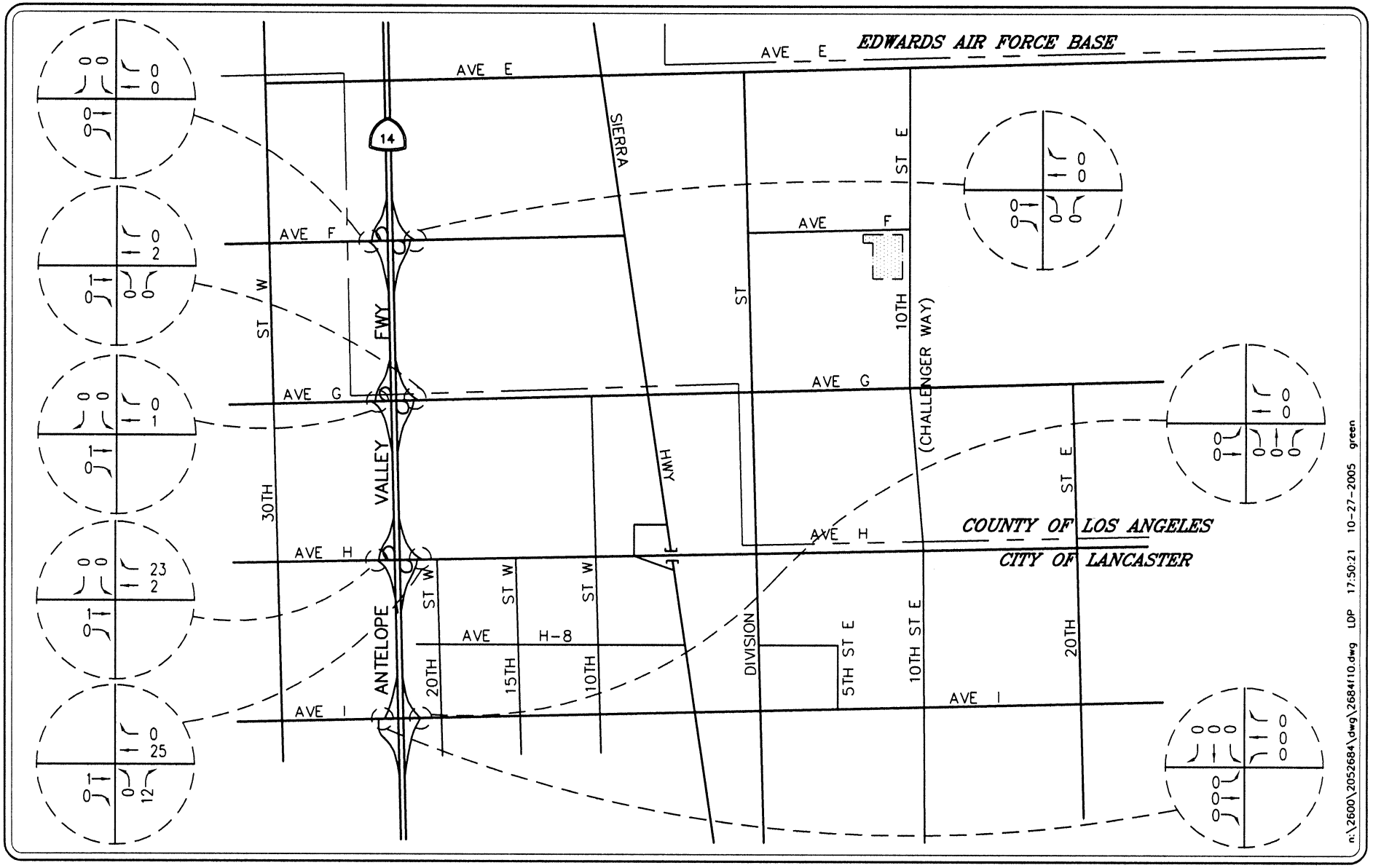
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 9

PROJECT-GENERATED AM PEAK HOUR TRAFFIC VOLUMES (WITHOUT AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 10

PROJECT-GENERATED PM PEAK HOUR TRAFFIC VOLUMES
(WITHOUT AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

TABLE 6
CUMULATIVE PROJECT TRIP GENERATION RATES AND ESTIMATES
Lancaster Landfill, County of Los Angeles

LAND USE	Unit / Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
TRIP RATES [a] Single-Family Detached Housing (ITE 210)	trips per DU	9.57	25%	75%	0.75	63%	37%	1.01
1 Kaufman and Broad ***SWC of H-4 and 15th St. West*** Single Family Detached Housing (City of Lancaster)	223 DU	2,134	42	125	167	142	83	225
2 Narcissa Homes ***SEC of Avenue I and 20th St. East*** Single Family Detached Housing (City of Lancaster)	130 DU	1,244	24	73	97	82	49	131
3 Hillview Homes, Inc. ***SEC of 15th St. East and Avenue I*** Single Family Detached Housing (City of Lancaster)	112 DU	1,072	21	63	84	71	42	113
4 Forcast Homes ***SWC of 20th St. West and future Avenue H-8*** Single Family Detached Housing (City of Lancaster)	151 DU	1,445	28	85	113	96	56	152
TOTAL CUMULATIVE PROJECT TRIPS		**5,895**	**115**	**346**	**461**	**391**	**230**	**621**

Note:
[a] Source: *Trip Generation*, 7th Edition, ITE, November 2003

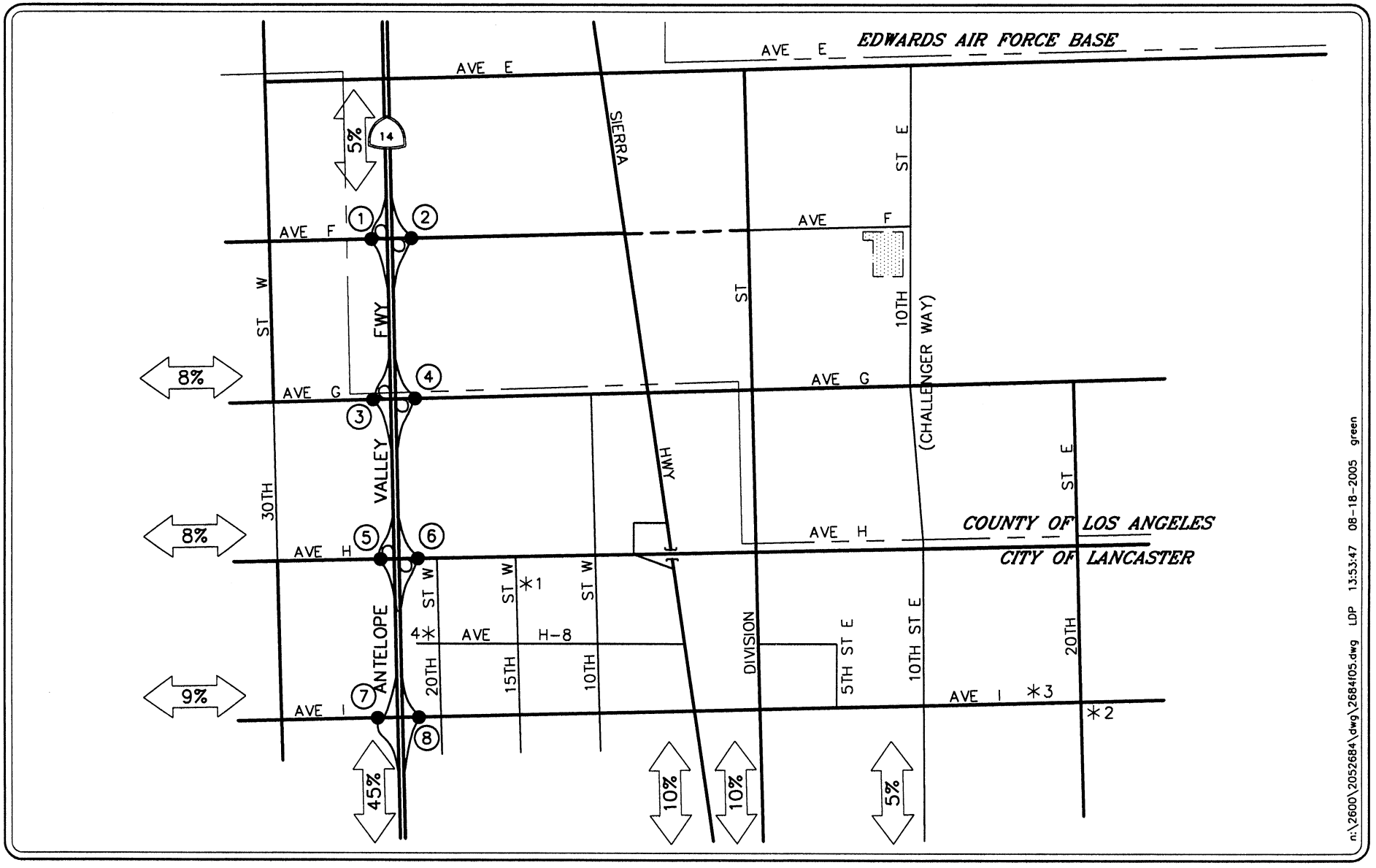
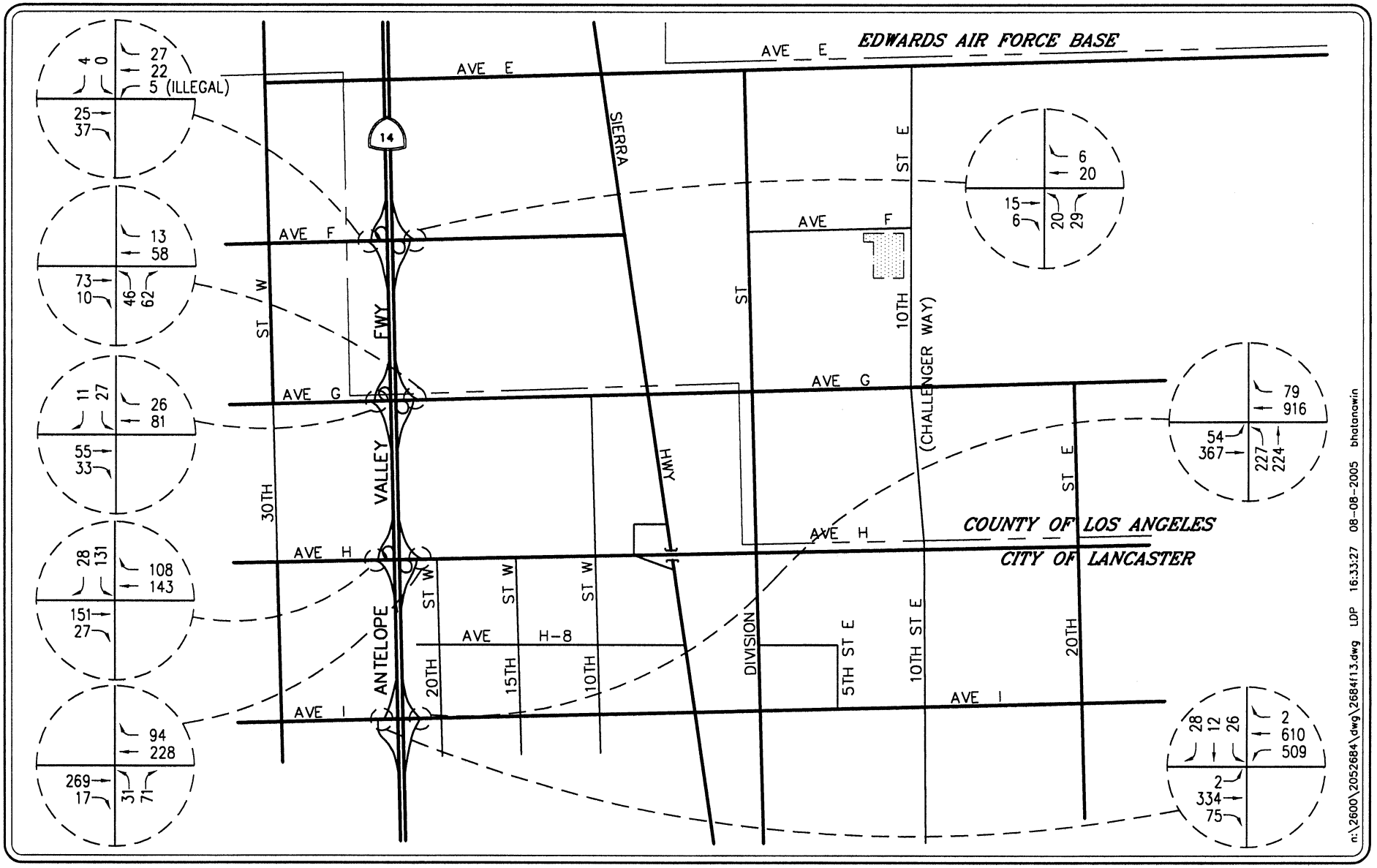


FIGURE 11

CUMULATIVE PROJECT TRAFFIC DISTRIBUTION PATTERN

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

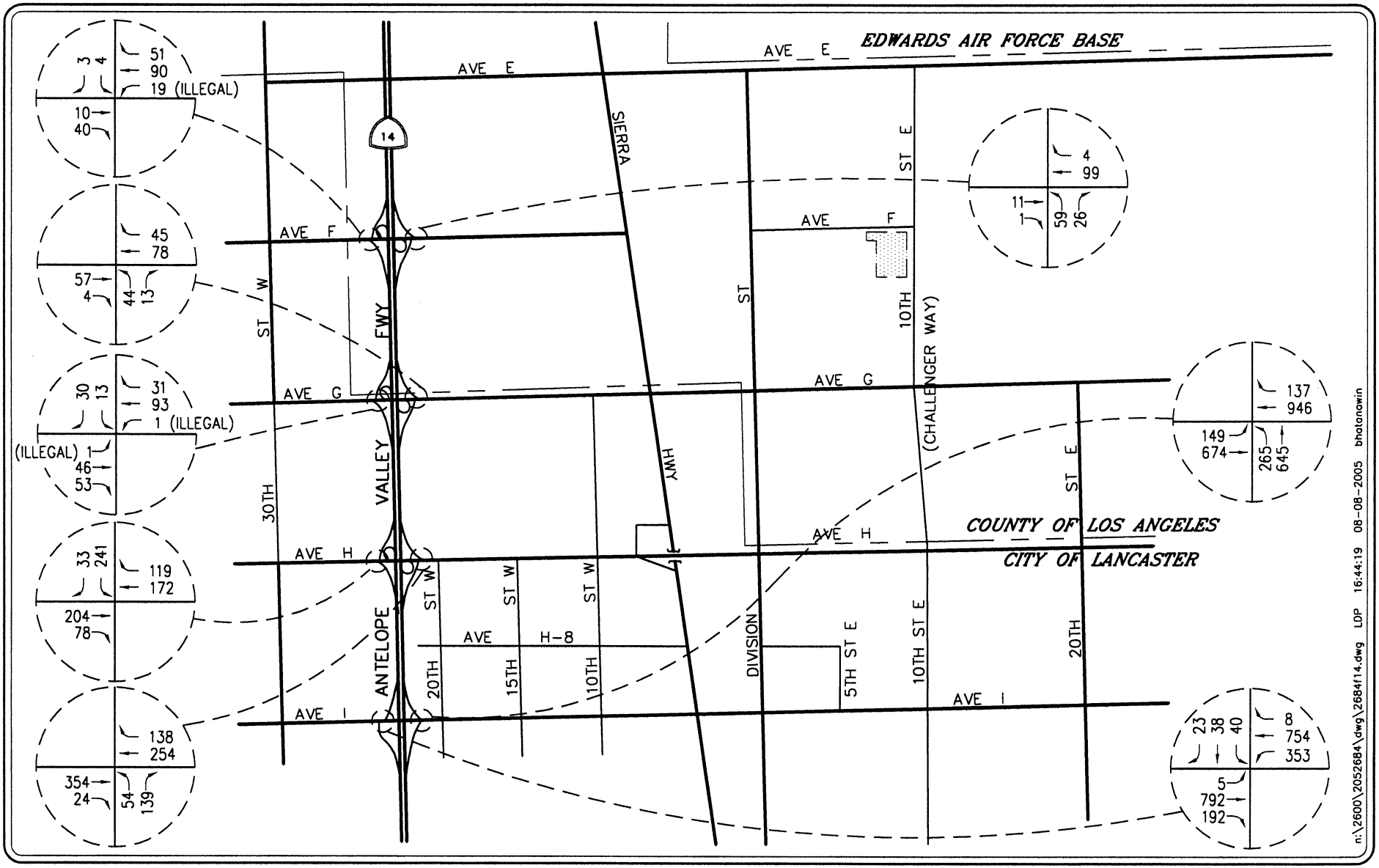
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 12

YEAR 2006 CUMULATIVE BASE AM PEAK HOUR TRAFFIC VOLUMES

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

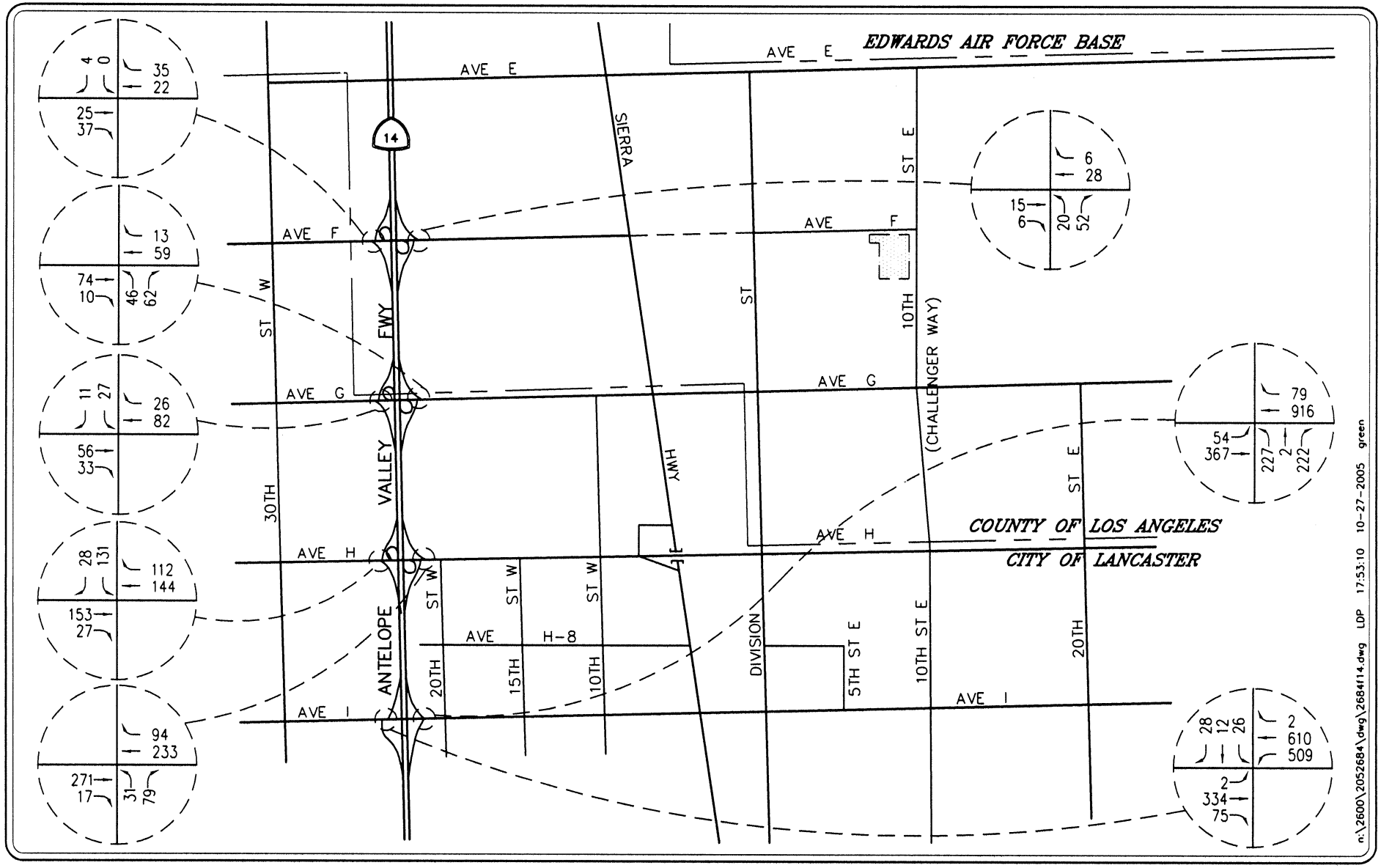
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 13

YEAR 2006 CUMULATIVE BASE PM PEAK HOUR TRAFFIC VOLUMES

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

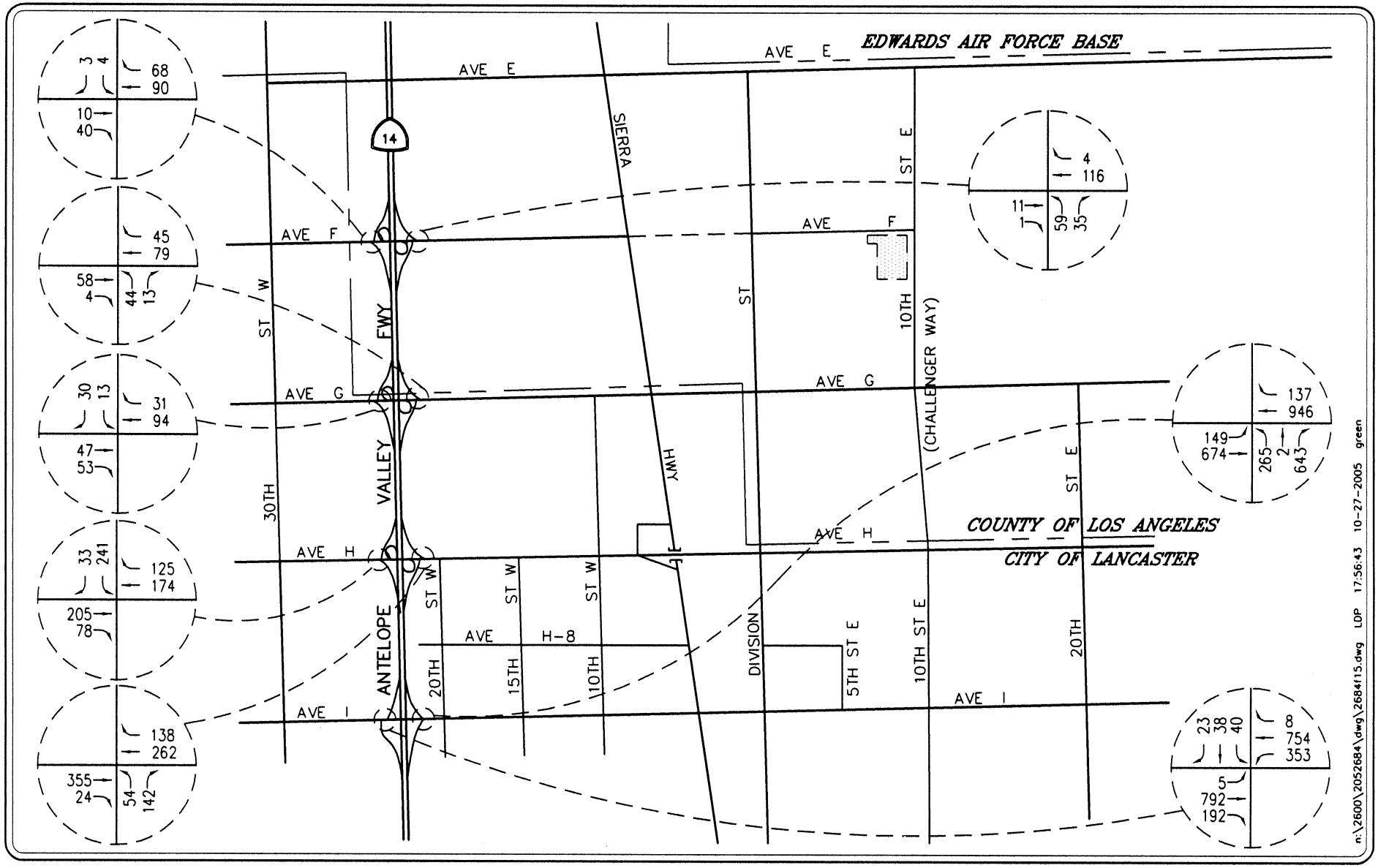
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 14

YEAR 2006 CUMULATIVE + PROJECT AM PEAK HOUR TRAFFIC VOLUMES (WITH AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

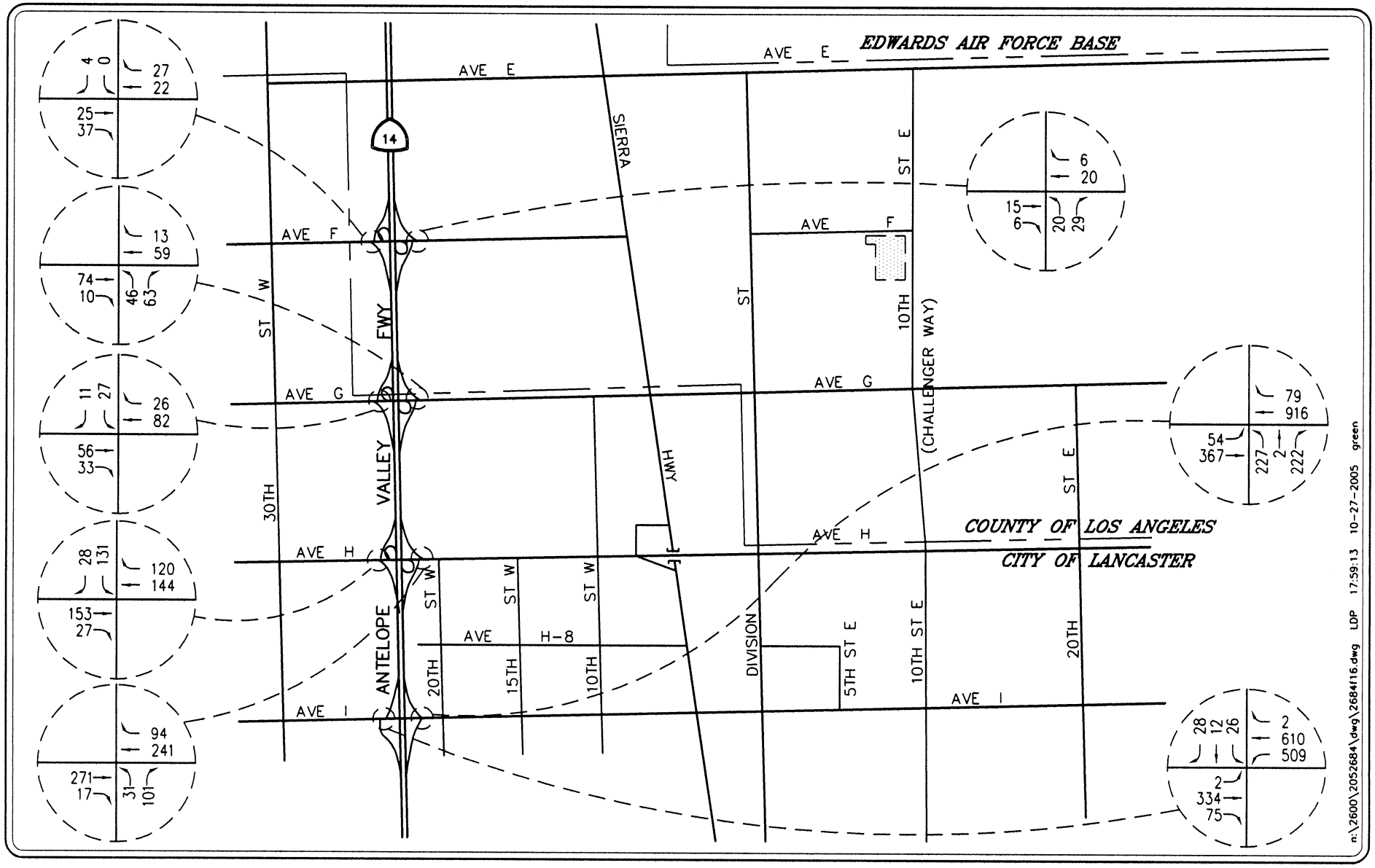
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 15

YEAR 2006 CUMULATIVE + PROJECT PM PEAK HOUR TRAFFIC VOLUMES (WITH AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

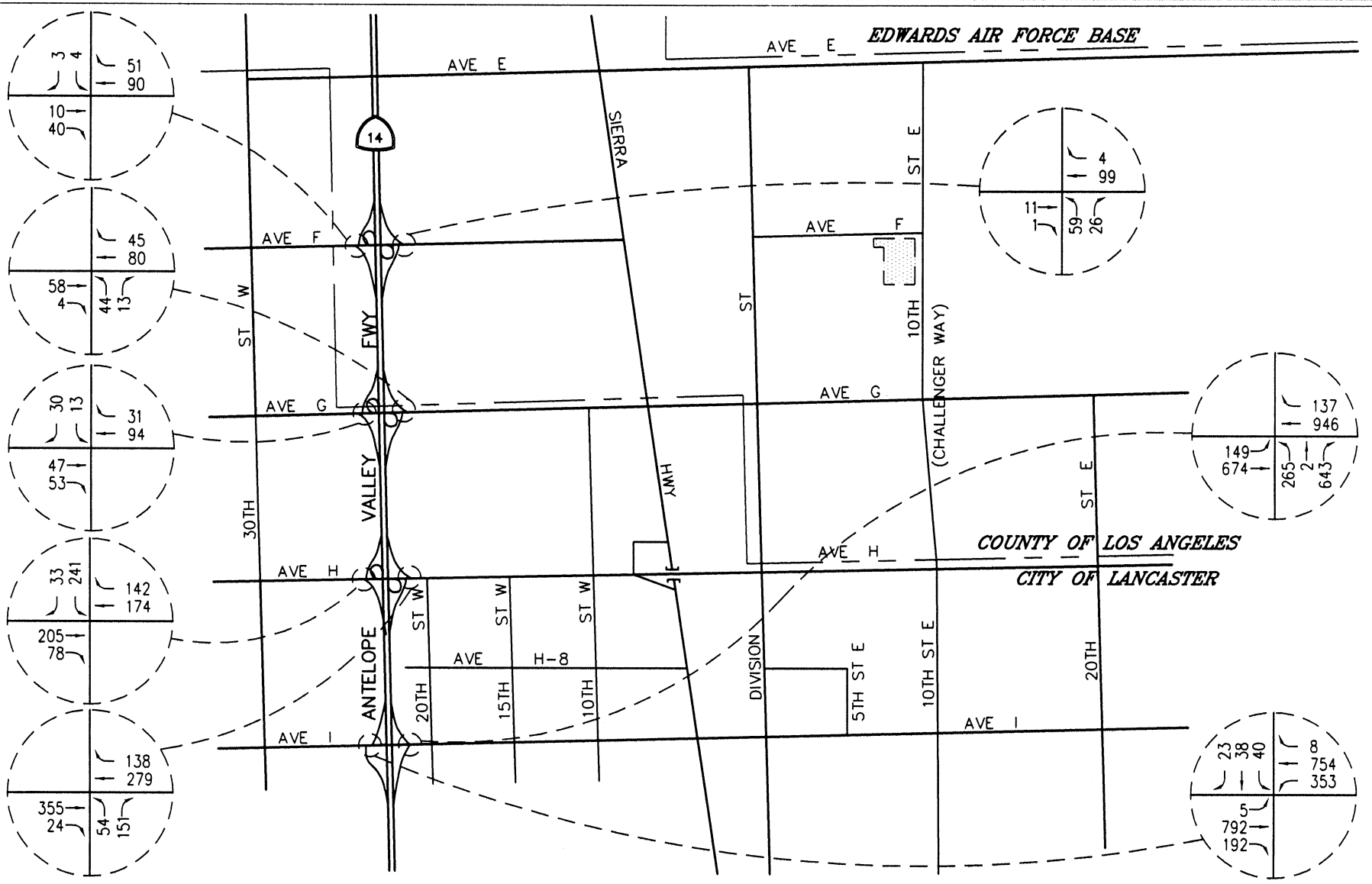
KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 16

YEAR 2006 CUMULATIVE + PROJECT AM PEAK HOUR TRAFFIC VOLUMES (WITHOUT AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES



LINSCOTT LAW & GREENSPAN engineers

NO SCALE

KEY

PROJECT SITE (EXISTING LANDFILL)

FIGURE 17

YEAR 2006 CUMULATIVE + PROJECT PM PEAK HOUR TRAFFIC VOLUMES (WITHOUT AVENUE F EXTENSION)

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

6.1 Significant Traffic Impact Criteria

In order to provide a quantitative basis for determining the significant traffic impact at a specific intersection, it was necessary to establish the criteria to be used in the analysis. Based upon County traffic study guidelines, the project is considered to have a significant/project-related impact if the following criteria are met:

Without Project		With Project
Level of Service	ICU	ICU Increase
C	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

6.2 Year 2006 Cumulative Base Traffic Conditions

The projected Year 2006 Cumulative Base peak hour traffic volumes were analyzed to determine the level of service for each of the analyzed intersections. **Table 7** indicates that all eight key intersections are projected to operate at acceptable LOS D or better during all analyzed peak hours.

6.3 Year 2006 Cumulative + Project Traffic Conditions

The projected Year 2006 Cumulative + Project peak hour traffic volumes, with and without the Avenue F extension, were analyzed to determine the level of service for each of the analyzed intersections. **Table 7** indicates that all of the eight key intersections are projected to operate at LOS D or better during each of the analyzed peak hours.

Based upon the application of the significance criteria described previously, **Table 7** indicates that the project is not expected to cause significant traffic impacts at any of the eight key intersections; therefore, physical mitigation measures at intersections are not necessary.

Furthermore, seven of the eight analyzed intersections are projected to operate at LOS A with the addition of project-generated traffic. This means that the street system surrounding the project site could handle additional traffic much greater than the minor increases anticipated for the project. LOS A corresponds to 60% of the intersection's capacity, while LOS D (minimum acceptable level of service at intersections) translates to 90% of the intersection's capacity. Therefore, there is 30% of remaining capacity before any of the seven key intersections are considered deficient. This translates to approximately 480 peak hour trips (30% of 1,600 vehicles per hour per lane of capacity) that the project could add per lane to the critical volumes of an intersection before any traffic deficiencies occur. The project-generated traffic volumes (approximately 30 peak hour trips) estimated in this study comprise a very small portion of the additional traffic that the key intersections could accommodate.

Per CMP criteria, the minimum acceptable level of service at freeway ramp intersections is LOS E, not LOS D. Therefore, if CMP criteria were applied, the LOS D projected at the intersection of Avenue I @ SR-14 northbound ramps during the PM peak hour would be considered totally acceptable, and far from "borderline" deficient. However, as a conservative measure, LOS D was applied in this study as the minimum standard for all eight key intersections.

LINSCOTT LAW & GREENSPAN engineers

TABLE 7
YEAR 2006 CUMULATIVE + PROJECT
INTERSECTION PEAK HOUR LEVELS OF SERVICE
Lancaster Landfill, County of Los Angeles

Key Intersections [a]	Peak Hour	Year 2006 Cumulative Base		Year 2006 Cumulative + Project (with Avenue F Extension)				Year 2006 Cumulative + Project (without Avenue F Extension)			
		ICU	LOS	ICU	LOS	ICU Increase	Significant Impact?	ICU	LOS	ICU Increase	Significant Impact?
1) Avenue F @	AM	0.14	A	0.14	A	0.00	no	0.14	A	0.00	no
SR-14 SB Ramps	PM	0.20	A	0.21	A	0.01	no	0.20	A	0.00	no
2) Avenue F @	AM	0.13	A	0.15	A	0.02	no	0.13	A	0.00	no
SR-14 NB Ramps	PM	0.20	A	0.21	A	0.01	no	0.20	A	0.00	no
3) Avenue G @	AM	0.18	A	0.18	A	0.00	no	0.18	A	0.00	no
SR-14 SB Ramps	PM	0.20	A	0.20	A	0.00	no	0.20	A	0.00	no
4) Avenue G @	AM	0.19	A	0.19	A	0.00	no	0.19	A	0.00	no
SR-14 NB Ramps	PM	0.20	A	0.21	A	0.01	no	0.21	A	0.01	no
5) Avenue H @	AM	0.23	A	0.23	A	0.00	no	0.23	A	0.00	no
SR-14 SB Ramps	PM	0.31	A	0.31	A	0.00	no	0.31	A	0.00	no
6) Avenue H @	AM	0.22	A	0.22	A	0.00	no	0.24	A	0.02	no
SR-14 NB Ramps	PM	0.27	A	0.28	A	0.01	no	0.28	A	0.01	no
7) Avenue I @	AM	0.54	A	0.54	A	0.00	no	0.54	A	0.00	no
SR-14 SB Ramps	PM	0.59	A	0.59	A	0.00	no	0.59	A	0.00	no
8) Avenue I @	AM	0.56	A	0.56	A	0.00	no	0.56	A	0.00	no
SR-14 NB Ramps	PM	0.89	D	0.89	D	0.00	no	0.89	D	0.00	no

Note:

[a] All key intersections are currently unsignalized, except for Avenue H @ SR-14 NB Ramps, Avenue I @ SR-14 NB Ramps, and Avenue I @ SR-14 SB Ramps that are signalized. Based upon LACDPW Traffic & Lighting Division staff's direction, all key intersections were analyzed as if they were signalized.

6.4 Freeway Analysis

Per the CMP Traffic Impact Analysis criteria, a freeway analysis must be conducted at "mainline freeway-monitoring stations where the project will add 150 or more trips, in either direction, during the AM or PM weekday peak hours." Based on the project-generated trips along the SR-14 Freeway (illustrated on **Figures 7** through **10**), the CMP freeway analysis criteria are not met (i.e., the project-generated traffic volumes fall below the threshold of 150 peak hour trips per direction). However, a mainline freeway segment analysis was performed as part of this study.

The existing (Year 2004, per Caltrans data; increased by the ambient growth of 3.8 percent to reflect Year 2005 conditions), and Year 2006 Cumulative Base and Cumulative plus Project daily/typical weekday traffic volumes were analyzed to determine the level of service for each of the five key SR-14 Freeway mainline segments. A freeway capacity of 76,500 vehicles per day (vpd) for four-lane freeway segments was applied.

Table 8 presents the results of the SR-14 Freeway mainline segment level of service analysis under Year 2006 conditions. The results indicate that all of the five analyzed segments currently, and are projected to, operate at LOS B or better on a typical weekday (LOS E is the minimum level of service standard for freeway mainline segments). Therefore, there are no freeway mainline deficiencies under existing conditions, or anticipated in the Year 2006, with or without the project.

6.5 Traffic Signal Warrants

To evaluate the need for traffic signals at the five stop-controlled key intersections, traffic signal warrant analysis was performed. Based upon the traffic signal warrants contained in the *Traffic Manual* (Caltrans, July 1996) and the *Manual on Uniform Traffic Control Devices* (U.S. Department of Transportation, Federal Highway Administration, March 1986), it was determined that none of the five stop-controlled intersections warrants a traffic signal under Year 2006 conditions without, or with, the implementation of the project. **Appendix D** contains the detailed traffic signal warrant worksheets.

7.0 SATURDAY ANALYSIS

Existing disposal operations at LLRC include service to local residents that utilize the site primarily on Saturdays. Private automobile and pick-up customers paying for disposal have been the largest component of Saturday vehicle counts. Site records indicate a historic single Saturday high vehicle count of 459 vehicles, that occurred as a program called "Free Dump Days" on two Saturdays a year. However, the anticipated limit is forecast to increase to a maximum of 900 vehicles on those two "Free Dump Days". While the vehicles per day for the "Free Dump Days" event on a Saturday may exceed the recommended maximum daily vehicle limit of 419 vehicles, the peak hour traffic volume on the adjacent roadways on a typical Saturday are significantly less than the peak hour of a typical weekday, and therefore no additional traffic impacts will occur as a result of the Saturday LLRC activity. In addition, because the event only occurs twice a year, the traffic impact would not be considered to be a typical worst-case condition.

LINSCOTT LAW & GREENSPAN engineers

TABLE 8
YEAR 2006 SR-14 FREEWAY MAINLINE LEVELS OF SERVICE
Lancaster Landfill, County of Los Angeles

SR-14 Freeway Segment	Existing (Year 2005)			Year 2006 Cumulative Base			Year 2006 Cumulative + Project					
	Existing Daily Volume	V/C [a]	LOS	Cumulative Base Daily Volume	V/C [a]	LOS	Project-Generated Daily Volumes	Cumulative + Project Daily Volume	V/C [a]	LOS	Change in V/C	Significant Project Impact?
A. SR-14 Freeway North of Avenue F	36,330	0.47	A	38,031	0.50	A	4	38,035	0.50	A	0.00	No
B. SR-14 Freeway Between Avenue F and Avenue G	37,887	0.50	A	39,647	0.52	A	273	39,920	0.52	A	0.00	No
C. SR-14 Freeway Between Avenue G and Avenue H	38,925	0.51	A	40,724	0.53	A	273	40,998	0.54	A	0.01	No
D. SR-14 Freeway Between Avenue H and Avenue I	39,963	0.52	A	41,802	0.55	A	273	42,075	0.55	A	0.00	No
E. SR-14 Freeway South of Avenue I	47,748	0.62	B	52,444	0.69	B	273	52,718	0.69	B	0.00	No

Note:

[a] Freeway capacity of 76,500 vehicles per day (vpd) based on a 4-lane freeway segment was applied.

8.0 PAVEMENT ANALYSIS

Pavement analysis was conducted along the four roadway segments adjoining to the project site to determine whether the project-generated net additive truck trips would have a significant impact on the existing pavement conditions. The *Caltrans Highway Design Manual* (Fourth Edition, July 1995) provided the basis for the pavement analysis.

Truck counts were conducted in July 19, 2005. A growth factor of 3.8 percent was applied to these existing volumes in order to forecast Year 2006 Cumulative Base conditions. The project-generated daily truck trips under conditions with, and without, the Avenue F extension, were added to the Year 2006 Cumulative Base truck volumes in order to forecast conditions with the implementation of the MSW increase for the project.

Per the direction of LACDPW Traffic and Lighting Division staff, the pavement integrity analysis focused on a ten-year horizon. Daily truck traffic was converted to 10-year Equivalent 18-kip Single Axle Loads (ESAL) by multiplying the truck volumes by an ESAL 10-year Constant value (i.e., 1,840 ESAL 10-year constant used, corresponding to 3-axle trucks). The Traffic Index (TI) was then determined based upon **Table 9**, which presents the relationship between ESAL and TI.

Table 10 summarizes the results of the pavement analysis. As indicated in **Table 10**, the existing truck volumes on three roadways result in TI values that are higher than their design TI (roadway segments along Avenue F, Division Street, and 10th Street). These results indicate that the existing pavement design cannot adequately accommodate existing truck traffic in the area along these three roadway segments. Since the design TI for the Avenue G segment is unknown, it is not certain how the existing truck traffic affects the pavement integrity of what that segment was designed for.

The addition of project-generated truck traffic will further aggravate existing deficiencies in pavement design. **Table 10** also shows that the project is not expected to increase TI values from Year 2006 Cumulative Base conditions at all of the segments analyzed, with the exception of 10th Street between Avenue F and Avenue G under conditions with the project, but without the Avenue F extension. Therefore, except for the 10th Street segment without the extension of Avenue F, the project would not cause any significant impacts on the pavement integrity of the four roadway segments.

The project-related increase in the TI value along 10th Street between Avenue F and Avenue G under conditions with the project, but without the Avenue F extension, constitutes a project significant impact. To mitigate this impact, the project will be required to contribute towards the reconstruction of the pavement and thickening of the base/sub-base on this one segment (if Avenue F is not extended).

TABLE 9
10-YEAR ESAL CONVERSION TO TRAFFIC INDEX (TI)
Lancaster Landfill, County of Los Angeles

Total 10-Year ESAL	Traffic Index (TI)
4,710	5.0
10,900	5.5
23,500	6.0
47,300	6.5
89,800	7.0
164,000	7.5
288,000	8.0
487,000	8.5
798,000	9.0
1,270,000	9.5
1,980,000	

Source: Caltrans, ***Highway Design Manual*** (July 1995)

LINSCOTT LAW & GREENSPAN engineers

TABLE 10
PAVEMENT ANALYSIS
Lancaster Landfill, County of Los Angeles

Roadway Segment	10-Year Design TI [b]	Existing (Year 2005) Daily # of Trucks	Existing (Year 2005) 10-Year Total ESAL [a]	Existing (Year 2005) TI	Year 2006 Cumulative Base Daily # of Trucks	Year 2006 Cumulative Base 10-Year Total ESAL [a]	Year 2006 Cumulative Base TI	Year 2006 Cumulative + Project (with Avenue F) Project Only	Year 2006 Cumulative + Project (with Avenue F) Daily # of Trucks	Year 2006 Cumulative + Project (with Avenue F) 10-Year Total ESAL [a]	Year 2006 Cumulative + Project (with Avenue F) TI	Year 2006 Cumulative + Project (without Avenue F) Project Only	Year 2006 Cumulative + Project (without Avenue F) Daily # of Trucks	Year 2006 Cumulative + Project (without Avenue F) 10-Year Total ESAL [a]	Year 2006 Cumulative + Project (without Avenue F) TI
1) Avenue F between Division St. and 10th St.	8	492	905,280	9.0	511	940,240	9.0	151	662	1,218,080	9.0	104	615	1,131,600	9.0
2) Division Street between Avenue F and Avenue G	7.5	532	978,880	9.0	552	1,015,680	9.0	47	599	1,102,160	9.0	97	649	1,194,160	9.0
3) 10th Street between Avenue F and Avenue G	5.5	209	384,560	8.0	217	399,280	8.0	40	257	472,880	8.0	86	303	557,520	8.5
4) Avenue G between Division St. and 10th St. E	n/a	471	866,640	9.0	489	899,760	9.0	4	493	907,120	9.0	4	493	907,120	9.0

Notes:

[a] As contained in the ***Caltrans Highway Design Manual*** (July 1995), the ESAL 10-Year constant is 1,840 (3-axle trucks).

[b] Design Traffic Indeces (TI) were provided by LACDPW staff where available.

9.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Project Description*** – The project involves the expansion of Municipal Solid Waste (MSW) operations to a maximum of 3,000 tons per day at the existing Lancaster Landfill and Recycling Center. This plan to expand the MSW program will be implemented in the Year 2006. The project also includes tonnage increases from current operations related to greenwaste.

- ***Study Scope*** – The eight intersections analyzed in the study include (all currently unsignalized/stop-controlled except where noted):

    1) Avenue F at SR-14 Southbound Ramps
    2) Avenue F at SR-14 Northbound Ramps
    3) Avenue G at SR-14 Southbound Ramps
    4) Avenue G at SR-14 Northbound Ramps
    5) Avenue H at SR-14 Southbound Ramps
    6) Avenue H at SR-14 Northbound Ramps (signalized)
    7) Avenue I at SR-14 Southbound Ramps (signalized)
    8) Avenue I at SR-14 Northbound Ramps (signalized)

    Pavement integrity analysis was conducted at four roadway segments to determine if the project's increase in MSW would have a significant impact on pavement conditions. The four roadway segments include:

    1) Avenue F between Division Street and 10th Street
    2) Division Street between Avenue F and Avenue G
    3) 10th Street between Avenue F and Avenue G
    4) Avenue G between Division Street and 10th Street

    Freeway mainline segment level of service analysis was performed at five locations, which include the following:

    1) SR-14 Freeway north of Avenue F
    2) SR-14 Freeway between Avenue F and Avenue G
    3) SR-14 Freeway between Avenue G and Avenue H
    4) SR-14 Freeway between Avenue H and Avenue I
    5) SR-14 Freeway south of Avenue I

- ***Existing Traffic Conditions*** – All of the intersections currently operate at satisfactory levels of service (i.e., LOS D or better) during the AM and PM peak hours. It was also determined that none of the five stop-controlled intersections warrants a traffic signal under existing conditions.

- ***Project Trip Generation*** - The trip generation potential for the project was estimated based on the net addition of 97 trucks (estimated by comparing future/projected tonnage against existing average tonnage), converting these trucks to trips through the application of passenger car equivalents, and

adding passenger car trips for employees and visitors. The proposed increase in MSW and recyclables is expected to generate 408 daily trips, of which 65 trips (47 inbound, 18 outbound) would occur during the AM peak hour, and 53 trips (18 inbound, 35 outbound) would occur during the PM peak hour. This traffic impact analysis reflects a maximum vehicles per day of 419 vehicles.

- ***Year 2006 Cumulative Base Traffic Conditions*** – All of the intersections are projected to operate at satisfactory levels of service (i.e., LOS D or better) during the AM and PM peak hours. None of the five stop-controlled intersections warrants a traffic signal under Year 2006 Cumulative Base conditions.

- ***Year 2006 Cumulative + Project Traffic Conditions*** – All of the intersections are projected to operate at satisfactory levels of service (i.e., LOS D or better) during the AM and PM peak hours. None of the five stop-controlled intersections warrants a traffic signal under Year 2006 Cumulative + Project conditions.

  Based upon the application of the County's significance criteria, the project is not expected to cause significant traffic impacts at any of the eight key intersections; therefore, physical mitigation measures at intersections are not necessary.

  Furthermore, seven of the eight analyzed intersections are projected to operate at LOS A with the addition of project-generated traffic. This means that the street system surrounding the project site could handle additional traffic much greater than the minor increases anticipated for the project. The project-generated traffic volumes (approximately 30 peak hour trips) estimated in this study comprise a very small portion of the additional traffic that the key intersections could accommodate.

  Per CMP criteria, the minimum acceptable level of service at freeway ramp intersections is LOS E, not LOS D. Therefore, if CMP criteria were applied, the LOS D projected at the intersection of Avenue I @ SR-14 northbound ramps during the PM peak hour would be considered totally acceptable, and far from "borderline" deficient. However, as a conservative measure, LOS D was applied in this study as the minimum standard for all eight key intersections.

- ***Saturday Analysis*** – A program called "Free Dump Days", which occurs on two Saturdays a year, will have an anticipated vehicle limit of 900 vehicles per day. While the vehicles per day for the "Free Dump Days" event on a Saturday may exceed the recommended maximum daily vehicle limit of 419 vehicles, the peak hour traffic volume on the adjacent roadways on a typical Saturday are significantly less than the peak hour of a typical weekday, and therefore no additional traffic impacts will occur as a result of the Saturday LLRC activity. In addition, because the event only occurs twice a year, the traffic impact would not be considered to be a typical worst-case condition.

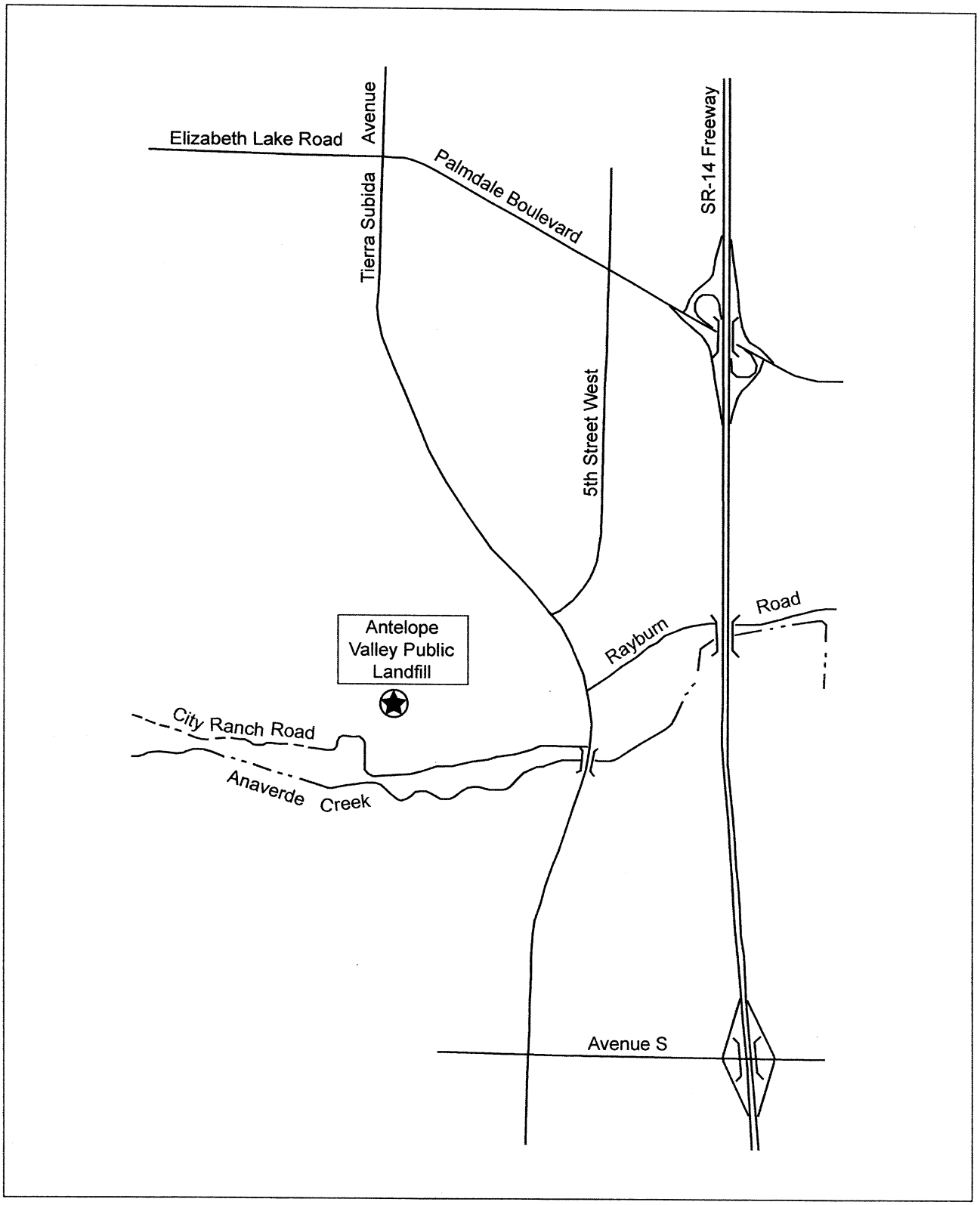
- ***Pavement Integrity Analysis*** – The project is not expected to increase TI values from Year 2006 Cumulative Base conditions at all of the segments analyzed, with the exception of 10th Street between Avenue F and Avenue G under conditions with the project, but without the Avenue F

extension. Therefore, except for the 10th Street segment without the extension of Avenue F, the project would not cause any significant impacts on the pavement integrity of the four roadway segments.

The project-related increase in the TI value along 10th Street between Avenue F and Avenue G under conditions with the project, but without the Avenue F extension, constitutes a project significant impact. To mitigate this impact, the project will be required to contribute towards the reconstruction of the pavement and thickening of the base/sub-base on this one segment (if Avenue F is not extended).

APPENDIX A

PALMDALE LANDFILL INFORMATION



EDAW N.T.S.

Figure 1-2
Local Vicinity

DESCRIPTION OF SERVICES TRANSFERRED FROM LLRC TO THE PALMDALE LANDFILL OPERATIONS LOCATION

Refuse collection/trucking operations, maintenance and fueling facilities at LLRC were abandoned in early 2004 in favor of a new centralized operations facility approximately 16 miles south of LLRC in Palmdale, California. The new facility is within the property of the Antelope Valley Recycling and Disposal Facility (also known as Antelope Valley Public Landfill) and incorporates all necessary support functions with a modern maintenance shop for more efficient business operations. Abandoned refuse collection structures at LLRC have been removed from the Lancaster property.

The relocation of these facilities has not changed disposal activity of the refuse collection vehicles as the Lancaster community continues to be served using the same methods resulting in the LLRC being the disposal location of choice for efficient routing. Growth in the Lancaster area combined with convenience of the LLRC location have offset any minor reduction in landfill traffic that might otherwise be expected as a result of a small component of end of day loads (in the southerly portion of the community) which may be more inclined to travel to the Palmdale location. No reduction in total daily traffic to the LLRC site has been experienced to date.

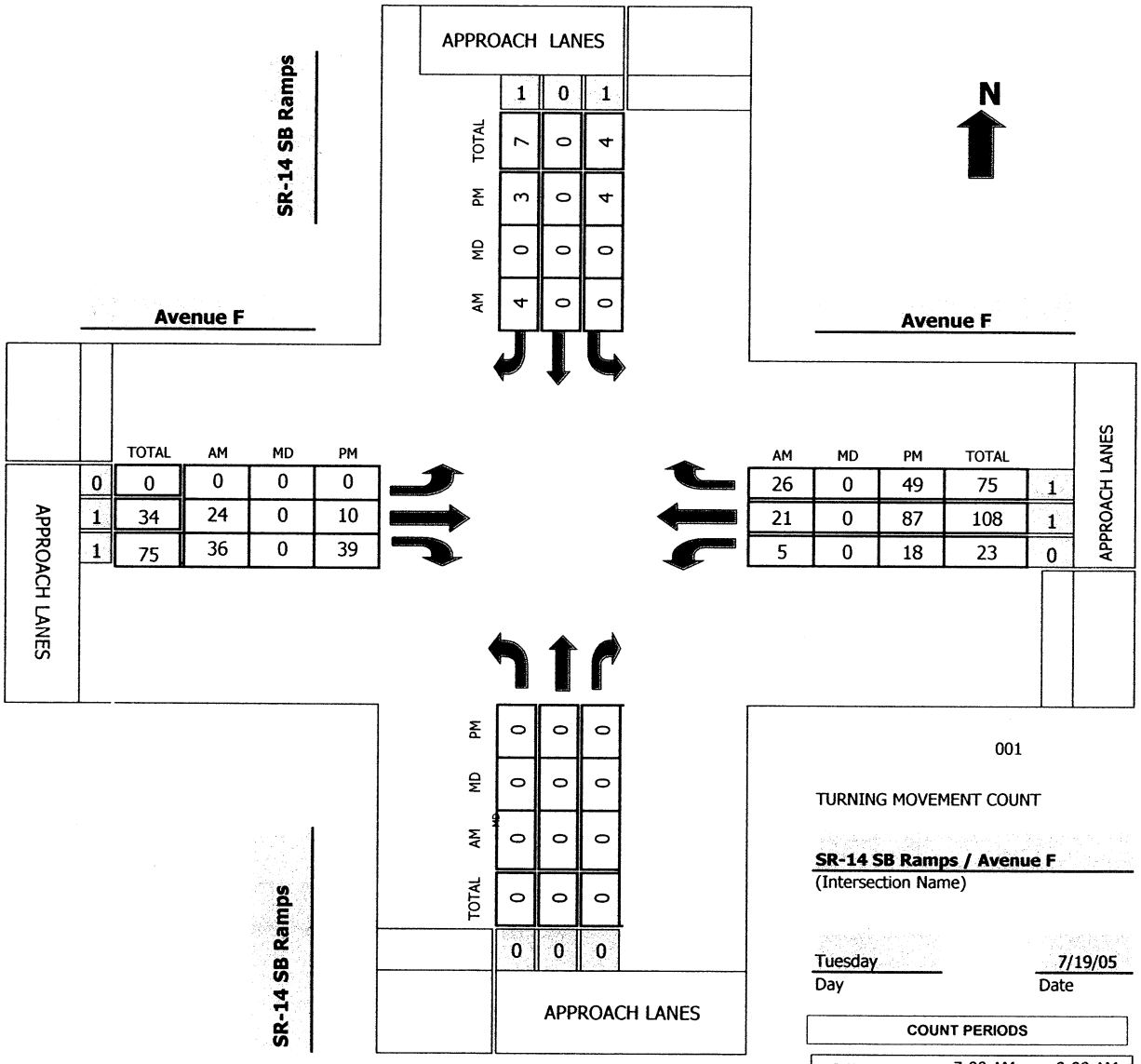
APPENDIX B

TRAFFIC COUNT DATA

#1

TMC Summary of SR-14 SB Ramps/Avenue F

Project #: 05-2276-001



Intersection Turning Movement

Prepared by: Southland Car Counters

#1

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue F DAY: TUESDAY PROJECT# 05-2276-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	1	1	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM				1		0		2	9	0	2	1	15
7:15 AM				0		0		10	7	0	9	6	32
7:30 AM				0		0		5	7	0	5	9	26
7:45 AM				0		3		6	13	1	2	8	33
8:00 AM				0		1		3	9	4	5	3	25
8:15 AM				0		0		1	3	4	3	3	14
8:30 AM				0		0		1	13	1	4	6	25
8:45 AM				0		0		3	7	2	5	3	20
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 1	ST 0	SR 4	EL 0	ET 31	ER 68	WL 12	WT 35	WR 39	TOTAL 190

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	0	0	0	0	4	0	24	36	5	21	26	116
PEAK HR. FACTOR:		0.000			0.333			0.789			0.867		0.879

CONTROL: 1-Way Stop SB

Intersection Turning Movement

Prepared by: Southland Car Counters

#1

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue F DAY: TUESDAY PROJECT# 05-2276-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	1	1	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM				0		0		3	4	0	9	4	20
4:15 PM				1		3		5	5	2	11	8	35
4:30 PM				0		2		2	6	1	13	10	34
4:45 PM				1		0		1	9	6	16	18	51
5:00 PM				1		1		4	11	4	12	13	46
5:15 PM				2		1		1	8	6	35	13	66
5:30 PM				0		1		4	11	2	24	5	47
5:45 PM				0		0		3	6	2	14	9	34
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	0	0	5	0	8	0	23	60	23	134	80	333

PM Peak Hr Begins at: 445 PM

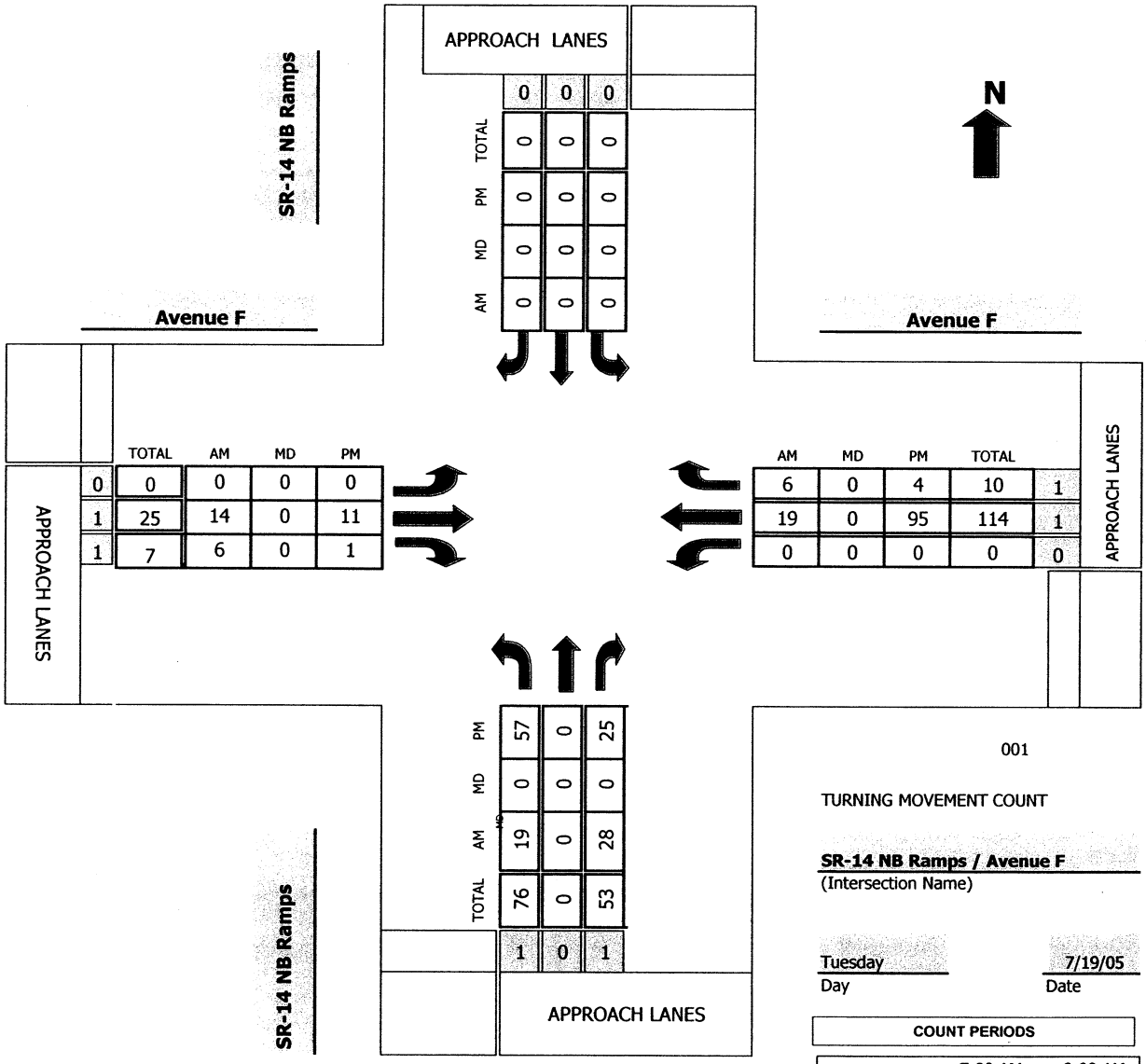
PEAK VOLUMES =	0	0	0	4	0	3	0	10	39	18	87	49	210
PEAK HR. FACTOR:		0.000			0.583			0.817			0.713		0.795

CONTROL: 1-Way Stop SB

#2

TMC Summary of SR-14 NB Ramps/Avenue F

Project #: 05-2276-002



001

TURNING MOVEMENT COUNT

SR-14 NB Ramps / Avenue F
(Intersection Name)

Tuesday — Day

7/19/05 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#2

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue F DAY: TUESDAY PROJECT# 05-2276-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3		9					2	1		3	2	20
7:15 AM	9		8					7	4		6	1	35
7:30 AM	5		6					2	1		4	0	18
7:45 AM	2		5					3	0		6	3	19
8:00 AM	4		1					4	0		5	0	14
8:15 AM	2		7					1	0		8	0	18
8:30 AM	7		4					1	0		9	1	22
8:45 AM	5		5					3	0		5	0	18
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	37	0	45	0	0	0	0	23	6	0	46	7	164

AM Peak Hr Begins at: 700 AM

PEAK													
VOLUMES =	19	0	28	0	0	0	0	14	6	0	19	6	92
PEAK HR. FACTOR:		0.691			0.000			0.455			0.694		0.657

CONTROL: 1-Way Stop NB

Intersection Turning Movement

Prepared by: Southland Car Counters

#2

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue F DAY: TUESDAY PROJECT# 05-2276-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7		3					3	0		5	1	19
4:15 PM	7		12					6	0		12	0	37
4:30 PM	6		6					1	1		24	0	38
4:45 PM	11		10					1	0		24	2	48
5:00 PM	8		7					5	0		24	0	44
5:15 PM	23		3					3	0		30	1	60
5:30 PM	15		5					2	1		17	1	41
5:45 PM	9		3					3	0		14	0	29
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	86	0	49	0	0	0	0	24	2	0	150	5	316

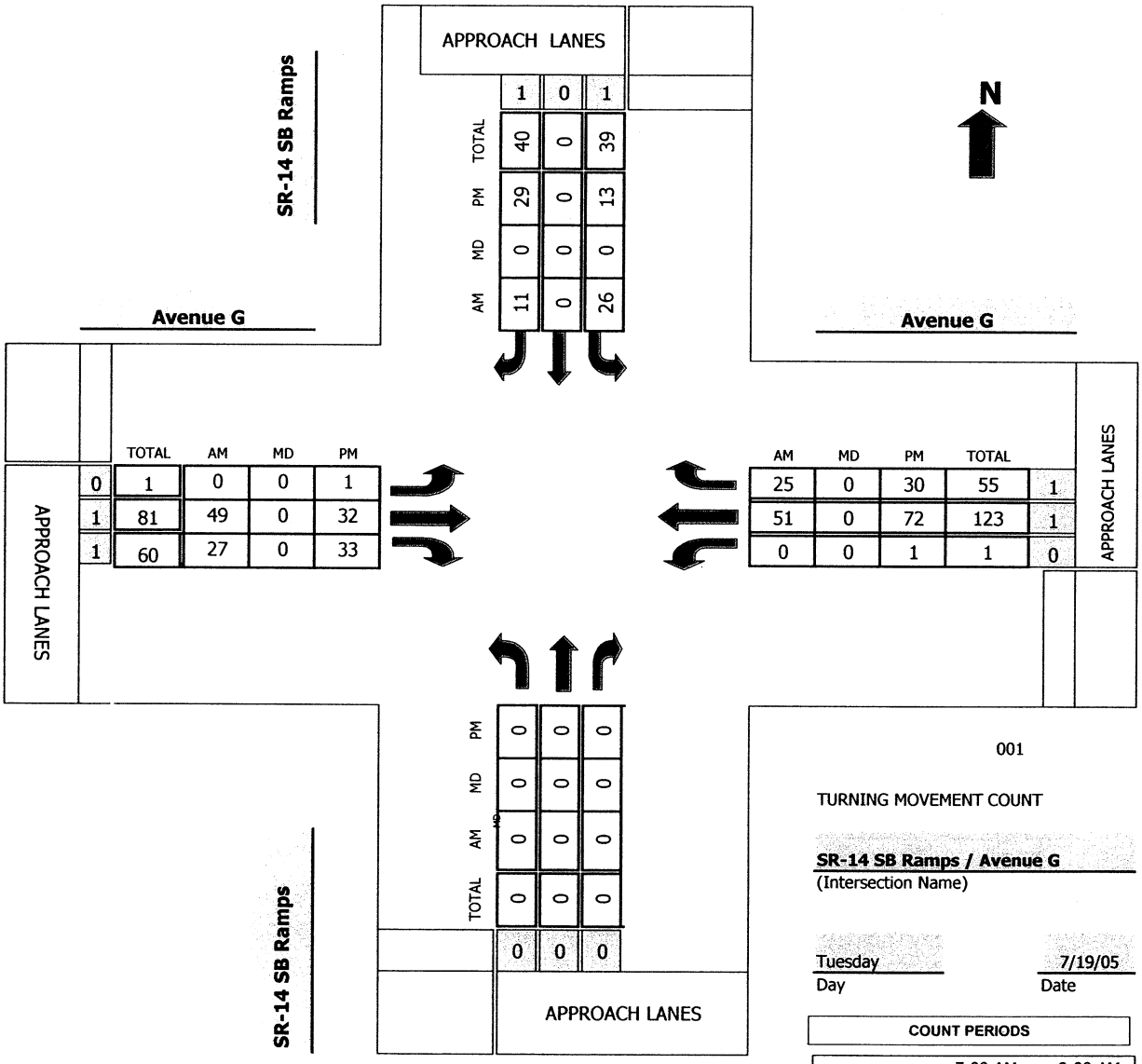
PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	57	0	25	0	0	0	0	11	1	0	95	4	193
PEAK HR. FACTOR:		0.788			0.000			0.600			0.798		0.804

CONTROL: 1-Way Stop NB

TMC Summary of SR-14 SB Ramps/Avenue G

Project #: 05-2276-003



Intersection Turning Movement

Prepared by: Southland Car Counters

#3

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue G DAY: TUESDAY PROJECT# 05-2276-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	1	1	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM				10		4		8	2		13	3	40
7:15 AM				5		4		17	7		10	11	54
7:30 AM				7		4		14	4		15	4	48
7:45 AM				9		2		8	7		11	4	41
8:00 AM				5		1		10	9		15	6	46
8:15 AM				5		1		6	3		10	4	29
8:30 AM				15		0		8	4		17	3	47
8:45 AM				3		1		4	10		9	7	34
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 59	ST 0	SR 17	EL 0	ET 75	ER 46	WL 0	WT 100	WR 42	TOTAL 339

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	0	0	26	0	11	0	49	27	0	51	25	189
PEAK HR. FACTOR:		0.000			0.841			0.792			0.905		0.875

CONTROL: 1-Way Stop SB

Intersection Turning Movement

Prepared by: Southland Car Counters

#3

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue G DAY: TUESDAY PROJECT# 05-2276-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	1	1	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM				2		3	0	8	14	0	15	9	51
4:15 PM				3		10	0	5	8	1	19	14	60
4:30 PM				2		6	0	6	7	0	18	1	40
4:45 PM				3		9	1	16	10	0	11	10	60
5:00 PM				5		4	0	5	8	0	24	5	51
5:15 PM				3		7	0	9	8	0	16	10	53
5:30 PM				5		3	0	5	5	0	15	9	42
5:45 PM				2		8	0	2	2	0	15	4	33
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 25	ST 0	SR 50	EL 1	ET 56	ER 62	WL 1	WT 133	WR 62	TOTAL 390

PM Peak Hr Begins at: 415 PM

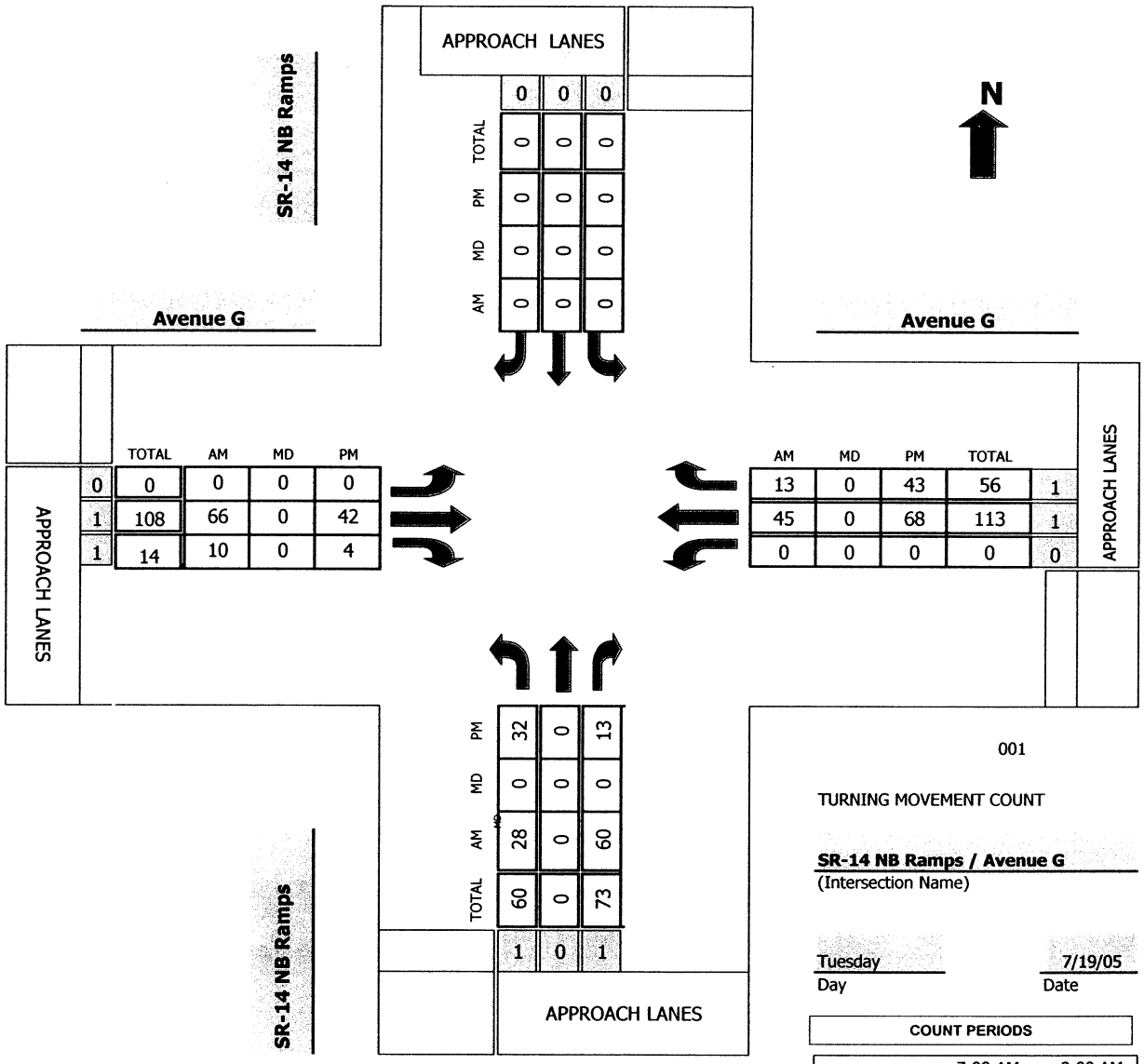
PEAK VOLUMES =	0	0	0	13	0	29	1	32	33	1	72	30	211
PEAK HR. FACTOR:		0.000			0.808			0.611			0.757		0.879

CONTROL: 1-Way Stop SB

#4

TMC Summary of SR-14 NB Ramps/Avenue G

Project #: 05-2276-004



001

TURNING MOVEMENT COUNT

SR-14 NB Ramps / Avenue G
(Intersection Name)

Tuesday — Day

7/19/05 — Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	700 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	400 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#4

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue G DAY: TUESDAY PROJECT# 05-2276-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	0	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8		19					18	1		9	5	60
7:15 AM	6		19					19	4		16	3	67
7:30 AM	7		12					13	5		8	3	48
7:45 AM	7		10					16	0		12	2	47
8:00 AM	3		4					12	2		12	3	36
8:15 AM	3		6					18	1		16	2	46
8:30 AM	10		5					18	2		9	1	45
8:45 AM	2		5					6	0		11	5	29
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	46	0	80	0	0	0	0	120	15	0	93	24	378

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	28	0	60	0	0	0	0	66	10	0	45	13	222
PEAK HR. FACTOR:		0.815			0.000			0.826			0.763		0.828

CONTROL: 1-Way Stop NB

Intersection Turning Movement

Prepared by: Southland Car Counters

#4

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue G DAY: TUESDAY PROJECT# 05-2276-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	1	1	0	1	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8		4					9	1		24	13	59
4:15 PM	9		4					6	0		19	8	46
4:30 PM	5		3					9	2		14	8	41
4:45 PM	10		2					18	1		11	14	56
5:00 PM	7		5					8	1		21	12	54
5:15 PM	7		2					8	2		20	5	44
5:30 PM	8		2					9	0		11	4	34
5:45 PM	11		2					4	0		11	9	37
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	65	0	24	0	0	0	0	71	7	0	131	73	371

PM Peak Hr Begins at: 400 PM

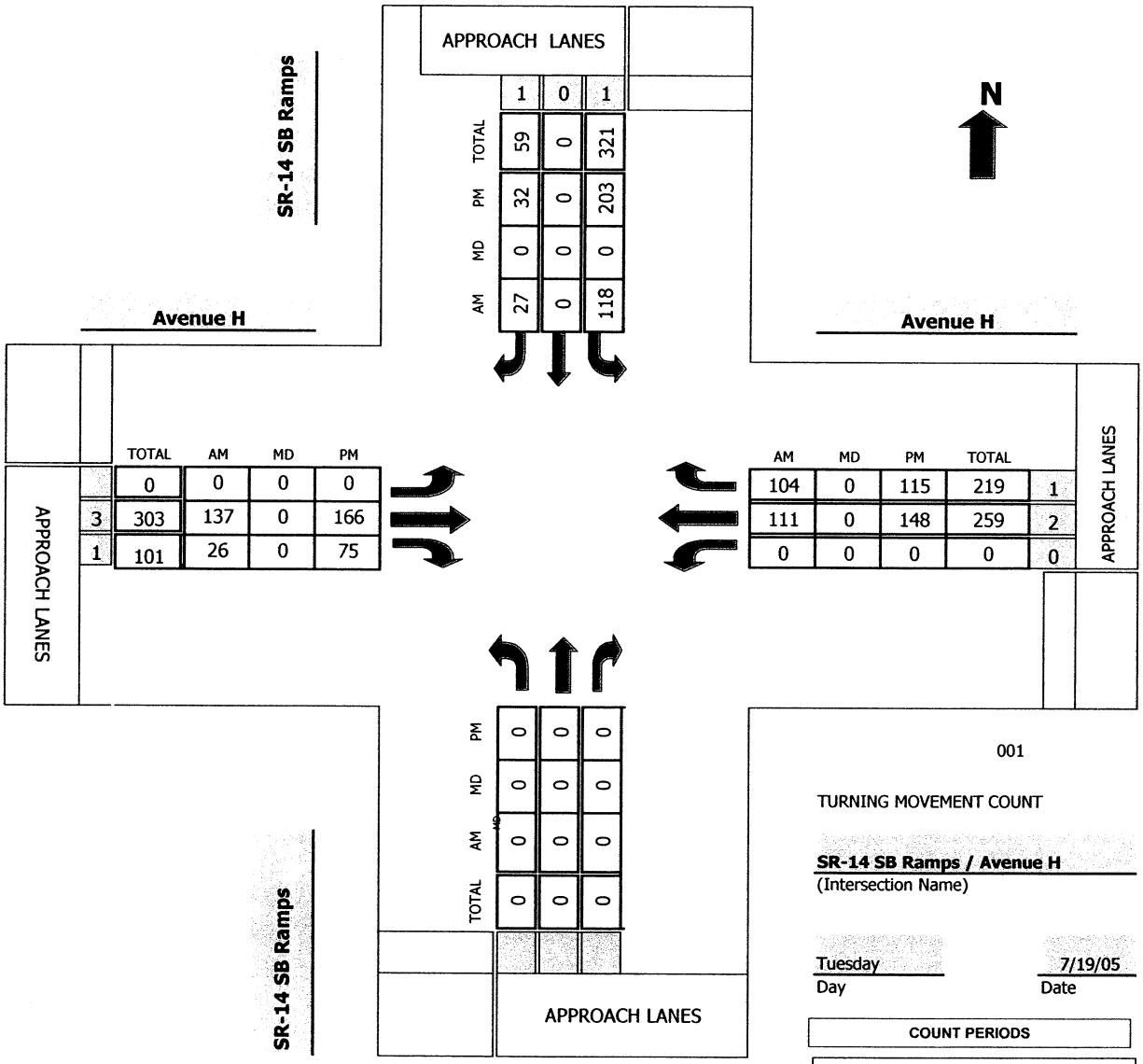
PEAK VOLUMES =	32	0	13	0	0	0	0	42	4	0	68	43	202
PEAK HR. FACTOR:		0.865			0.000			0.605			0.750		0.856

CONTROL: 1-Way Stop NB

#5

TMC Summary of SR-14 SB Ramps/Avenue H

Project #: 05-2276-005



001

TURNING MOVEMENT COUNT

SR-14 SB Ramps / Avenue H
(Intersection Name)

Tuesday
Day

7/19/05
Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#5

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue H DAY: TUESDAY PROJECT# 05-2276-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:				1	0	1		3	1	0	2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM				12		7		26	5		26	22	98
7:15 AM				14		9		25	4		28	24	104
7:30 AM				23		9		41	4		28	22	127
7:45 AM				43		7		39	9		47	31	176
8:00 AM				18		6		30	7		20	26	107
8:15 AM				34		5		27	6		16	25	113
8:30 AM				25		4		19	6		27	23	104
8:45 AM				29		5		22	11		37	17	121
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 198	ST 0	SR 52	EL 0	ET 229	ER 52	WL 0	WT 229	WR 190	TOTAL 950

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	0	0	0	118	0	27	0	137	26	0	111	104	523
PEAK HR. FACTOR:		0.000			0.725			0.849			0.689		0.743

CONTROL: 1-Way Stop SB

Intersection Turning Movement

Prepared by: Southland Car Counters

#5

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue H DAY: TUESDAY PROJECT# 05-2276-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:				1	0	1		3	1	0	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM				23		7		39	6		21	28	124
4:15 PM				35		1		34	12		23	29	134
4:30 PM				49		7		42	18		33	23	172
4:45 PM				81		14		61	30		19	28	233
5:00 PM				30		4		44	20		40	42	180
5:15 PM				43		7		19	7		56	22	154
5:30 PM				21		13		34	13		44	31	156
5:45 PM				29		12		24	8		52	14	139
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	0	0	0	311	0	65	0	297	114	0	288	217	1292

PM Peak Hr Begins at: 430 PM

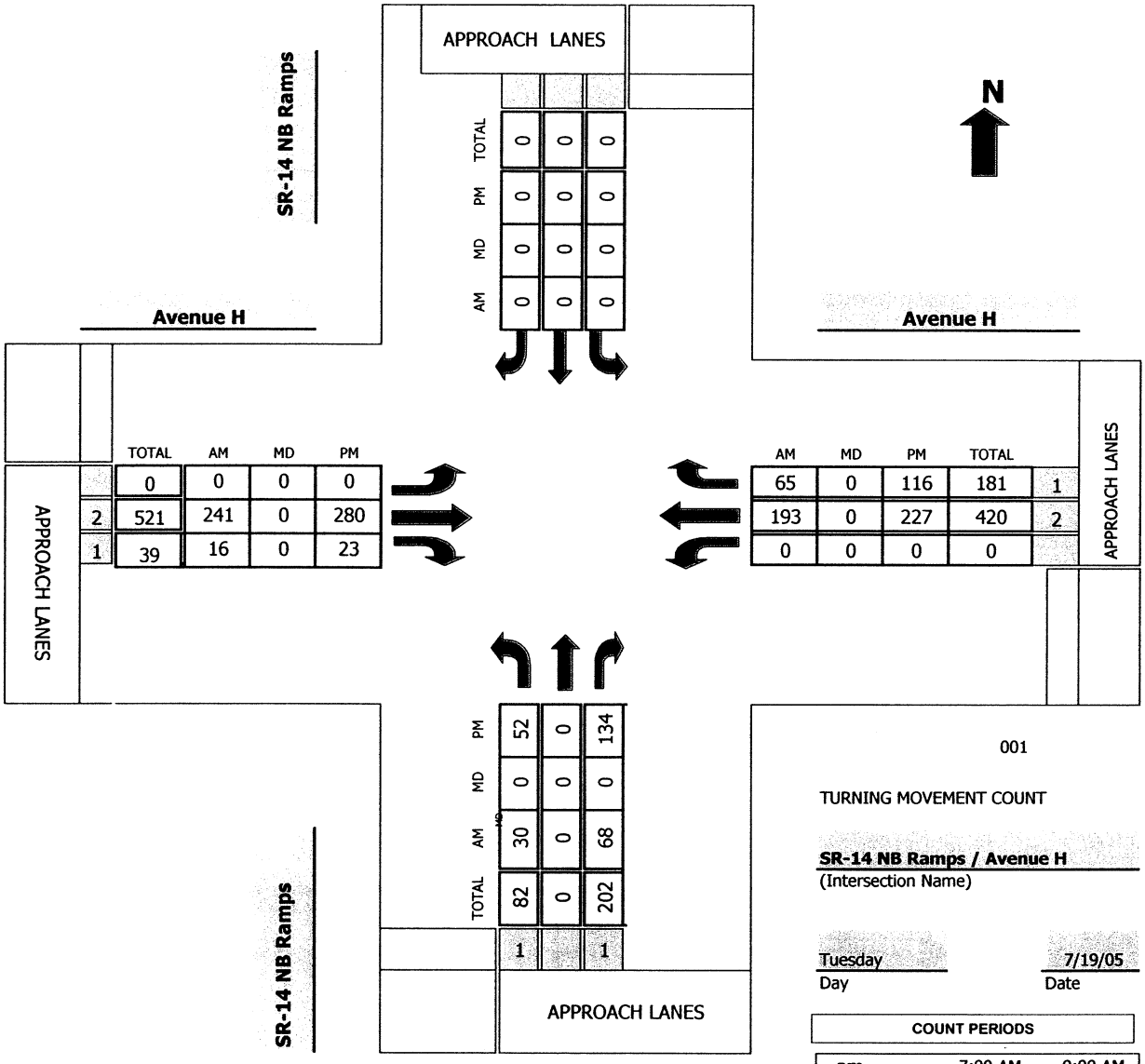
PEAK VOLUMES =	0	0	0	203	0	32	0	166	75	0	148	115	739
PEAK HR. FACTOR:		0.000			0.618			0.662			0.802		0.793

CONTROL: 1-Way Stop SB

#6

TMC Summary of SR-14 NB Ramps/Avenue H

Project #: 05-2276-006



001

TURNING MOVEMENT COUNT

SR-14 NB Ramps / Avenue H
(Intersection Name)

Tuesday — Day
7/19/05 — Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	730 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#6

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue H DAY: TUESDAY PROJECT# 05-2276-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1		1					2	1		2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	4		18					42	1		43	17	125
7:15 AM	5		18					43	2		49	16	133
7:30 AM	7		12					58	3		42	14	136
7:45 AM	9		24					72	8		69	13	195
8:00 AM	8		22					51	4		42	10	137
8:15 AM	6		10					60	1		40	28	145
8:30 AM	6		7					41	1		37	17	109
8:45 AM	12		10					39	4		34	7	106
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	57	0	121	0	0	0	0	406	24	0	356	122	1086

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	30	0	68	0	0	0	0	241	16	0	193	65	613
PEAK HR. FACTOR:		0.742			0.000			0.803			0.787		0.786

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

#6

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue H DAY: TUESDAY PROJECT# 05-2276-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1		1					2	1		2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	7		21					62	7		46	20	163
4:15 PM	13		28					67	7		41	31	187
4:30 PM	6		16					89	6		41	24	182
4:45 PM	8		27					86	13		42	26	202
5:00 PM	12		47					74	7		66	34	240
5:15 PM	15		25					63	2		62	30	197
5:30 PM	17		35					57	1		57	26	193
5:45 PM	17		29					52	8		49	31	186
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 95	NT 0	NR 228	SL 0	ST 0	SR 0	EL 0	ET 550	ER 51	WL 0	WT 404	WR 222	TOTAL 1550

PM Peak Hr Begins at: 445 PM

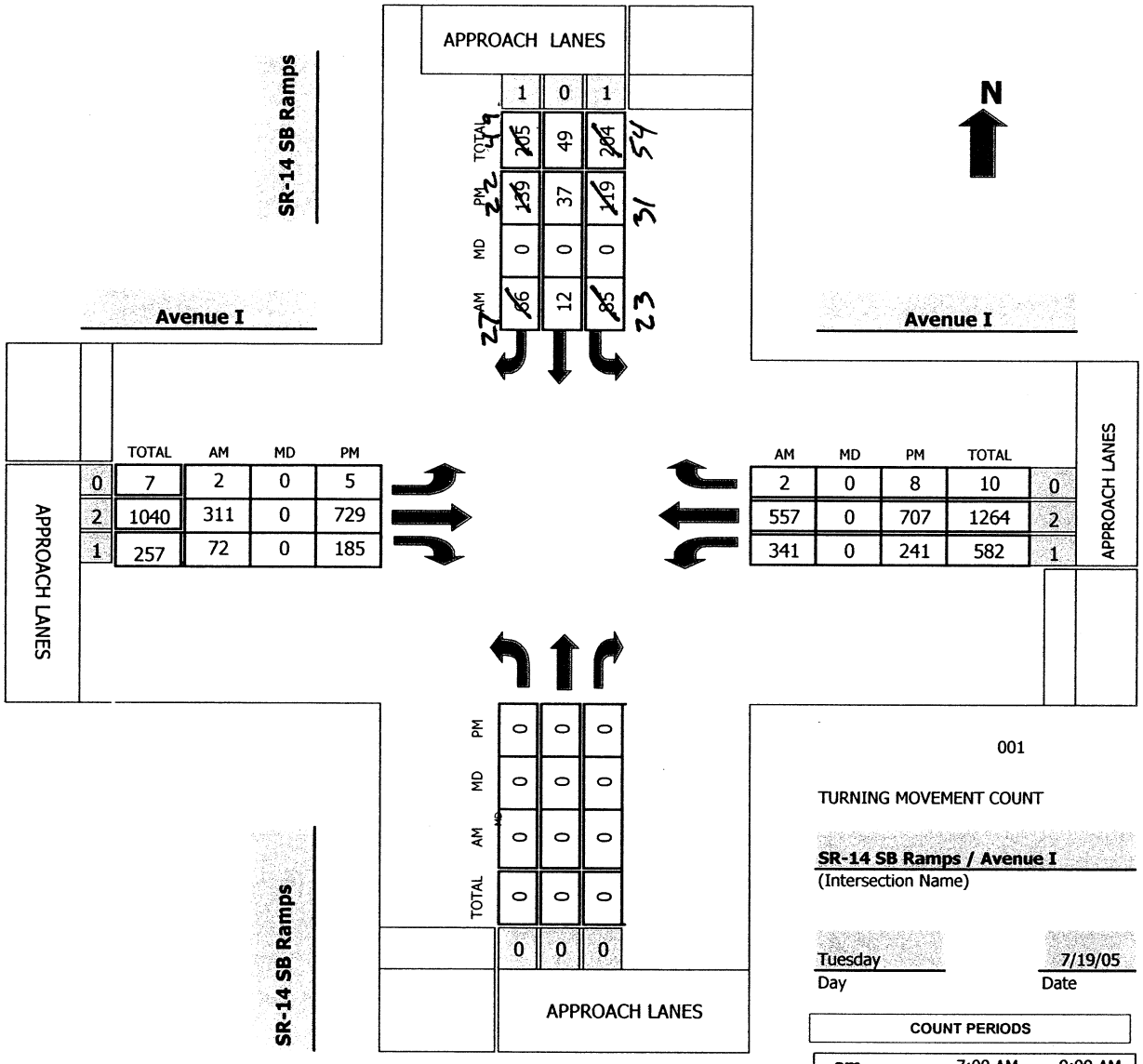
PEAK VOLUMES =	52	0	134	0	0	0	0	280	23	0	227	116	832
PEAK HR. FACTOR:		0.788			0.000			0.765			0.858		0.867

CONTROL: Signalized

#7

TMC Summary of SR-14 SB Ramps/Avenue I

Project #: 05-2276-007



001

TURNING MOVEMENT COUNT

SR-14 SB Ramps / Avenue I
(Intersection Name)

Tuesday
Day

7/19/05
Date

COUNT PERIODS			
am	7:00 AM	-	9:00 AM
noon	4:00 PM	-	6:00 PM
pm	4:00 PM	-	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#7

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue I DAY: TUESDAY PROJECT# 05-2276-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	2	1	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM				11	1	11	1	63	18	83	128	0	316
7:15 AM				15	1	16	2	70	14	94	133	0	345
7:30 AM				18	4	16	0	71	18	93	127	0	347
7:45 AM				28	5	22	0	83	17	88	187	0	430
8:00 AM				24	2	12	0	87	23	66	110	2	326
8:15 AM				25	2	17	1	76	23	69	95	0	308
8:30 AM				26	5	17	0	87	11	75	100	0	321
8:45 AM				29	4	23	2	89	19	76	132	0	374
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 176	ST 24	SR 134	EL 6	ET 626	ER 143	WL 644	WT 1012	WR 2	TOTAL 2767

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	0	0	0	85	12	66	2	311	72	341	557	2	1448
PEAK HR. FACTOR:		0.000			0.741			0.875			0.818		0.842

CONTROL: 1 way stop (S)

Intersection Turning Movement

Prepared by: Southland Car Counters

#7

N-S STREET: SR-14 SB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue I DAY: TUESDAY PROJECT# 05-2276-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	0	1	0	2	1	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM				26	4	30	0	150	69	76	144	0	499
4:15 PM				19	4	27	0	166	30	79	167	0	492
4:30 PM				32	7	36	3	266	61	48	159	0	612
4:45 PM				37	11	39	1	175	39	71	193	0	566
5:00 PM				24	14	28	0	143	39	59	193	0	500
5:15 PM				26	5	36	1	145	46	63	162	8	492
5:30 PM				29	11	28	0	138	39	64	135	1	445
5:45 PM				22	5	27	0	113	30	69	158	1	425
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 0	NR 0	SL 215	ST 61	SR 251	EL 5	ET 1296	ER 353	WL 529	WT 1311	WR 10	TOTAL 4031

PM Peak Hr Begins at: 430 PM

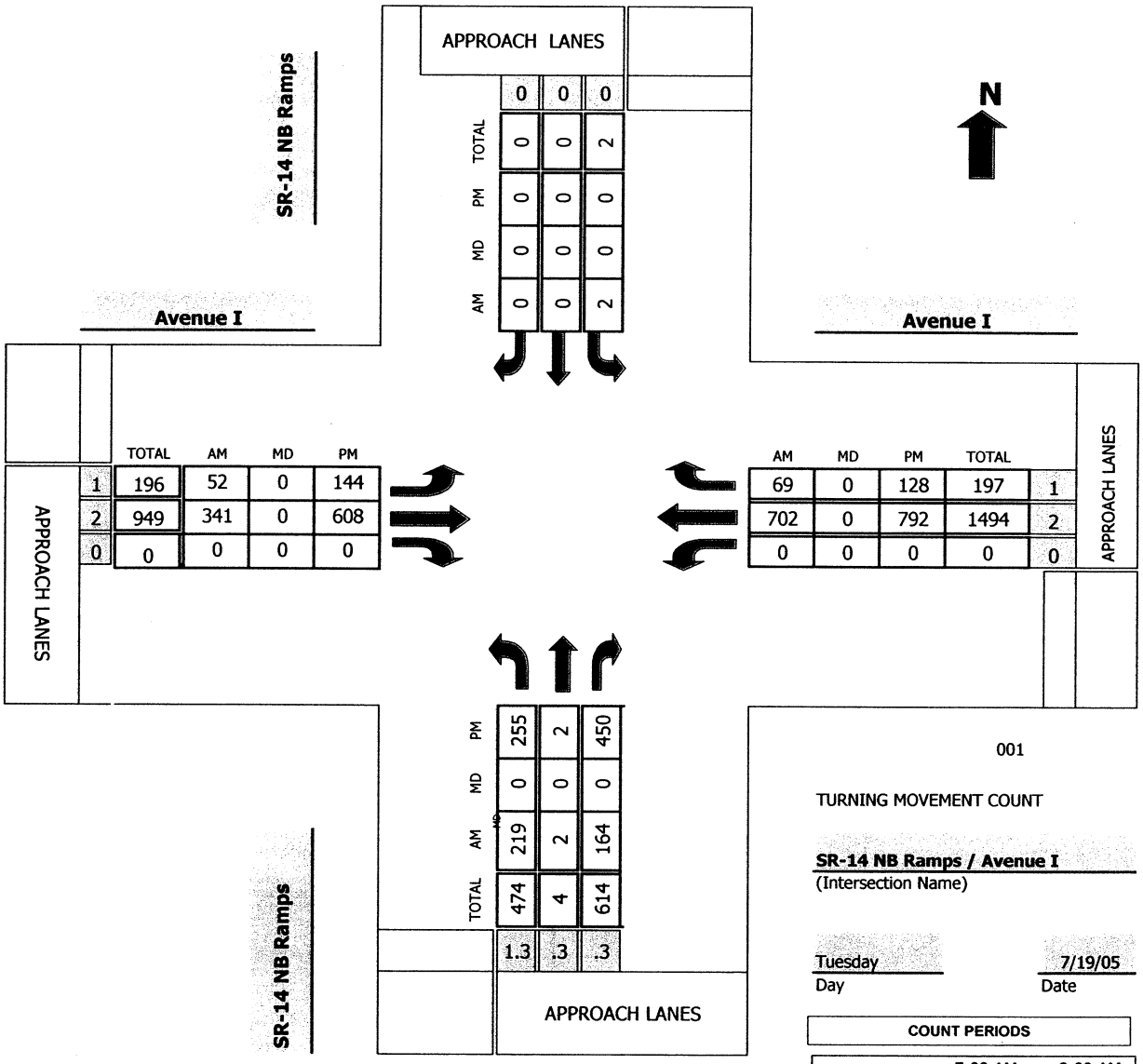
PEAK VOLUMES =	0	0	0	119	37	139	5	729	185	241	707	8	2170
PEAK HR. FACTOR:		0.000			0.848			0.696			0.905		0.886

CONTROL: 1 way stop (S)

#8

TMC Summary of SR-14 NB Ramps/Avenue I

Project #: 05-2276-008



001

TURNING MOVEMENT COUNT

SR-14 NB Ramps / Avenue I
(Intersection Name)

Tuesday — Day

7/19/05 — Date

COUNT PERIODS		
am	7:00 AM	9:00 AM
noon	4:00 PM	6:00 PM
pm	4:00 PM	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	500 PM

Intersection Turning Movement

Prepared by: Southland Car Counters

#8

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue I DAY: TUESDAY PROJECT# 05-2276-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.3	.3	.3	0	0	0	1	2	0	0	2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	47	0	26	0			20	48			148	19	308
7:15 AM	45	0	38	0			13	73			175	23	367
7:30 AM	47	1	37	2			10	81			181	10	369
7:45 AM	83	1	42	0			21	93			211	20	471
8:00 AM	44	0	47	0			8	94			135	16	344
8:15 AM	34	0	46	0			10	97			138	12	337
8:30 AM	29	0	36	0			14	107			137	14	337
8:45 AM	39	0	52	0			11	110			173	14	399
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	368	2	324	2	0	0	107	703	0	0	1298	128	2932

AM Peak Hr Begins at: 715 AM

PEAK													
VOLUMES =	219	2	164	2	0	0	52	341	0	0	702	69	1551
PEAK HR. FACTOR:		0.764			0.250			0.862			0.834		0.823

CONTROL: SIGNALIZED

Intersection Turning Movement

Prepared by: Southland Car Counters

#8

N-S STREET: SR-14 NB Ramps DATE: 7/19/2005 LOCATION: City of Lancaster

E-W STREET: Avenue I DAY: TUESDAY PROJECT# 05-2276-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.3	.3	.3	0	0	0	1	2	0	0	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	36	0	71				35	158			167	28	495
4:15 PM	44	1	92				25	138			161	26	487
4:30 PM	47	0	60				32	196			151	32	518
4:45 PM	51	1	88				27	144			152	27	490
5:00 PM	74	2	87				38	164			214	40	619
5:15 PM	79	0	110				44	151			192	27	603
5:30 PM	55	0	121				39	164			165	21	565
5:45 PM	47	0	132				23	129			221	40	592
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	433	4	761	0	0	0	263	1244	0	0	1423	241	4369

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	255	2	450	0	0	0	144	608	0	0	792	128	2379
PEAK HR. FACTOR:		0.935			0.000			0.926			0.881		0.961

CONTROL: SIGNALIZED

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-001E

Date: 7/20/2005

Location: Ave F btwn Division St and 10th St

#1

EASTBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	4	1	0	0	1	0	0	4	0	0	0	0	10
06:00	0	2	0	2	1	10	0	0	13	0	0	0	0	28
07:00	0	4	1	1	3	4	0	0	10	0	0	0	0	23
08:00	0	5	2	1	4	4	0	3	7	0	0	0	0	26
09:00	0	4	7	0	4	8	0	3	7	0	0	0	1	34
10:00	0	12	7	2	9	7	0	1	10	0	0	0	0	48
11:00	0	5	4	1	7	4	0	1	8	0	0	0	0	30
12:00 PM	0	3	5	3	6	6	0	2	6	0	0	0	1	32
13:00	0	7	3	0	5	6	0	0	12	0	0	0	1	34
14:00	0	11	4	0	7	6	0	5	5	0	0	0	0	38
15:00	1	11	5	0	5	5	0	3	9	0	0	0	0	39
16:00	0	3	6	0	1	6	0	0	1	0	0	0	0	17
17:00	0	1	0	0	1	3	0	0	0	0	0	0	0	5
18:00	0	8	0	0	1	0	0	0	0	0	0	0	0	9
19:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Totals	**1**	**89**	**47**	**10**	**55**	**70**		**18**	**92**				**3**	**385**
% of Totals	0%	23%	12%	3%	14%	18%		5%	24%				1%	100%
% AM		10%	6%	2%	7%	10%		2%	15%				0%	52%
AM Peak Hour		10:00	09:00	06:00	10:00	06:00		08:00	06:00				09:00	10:00
Volume		12	7	2	9	10		3	13				1	48
% PM	0%	13%	6%	1%	7%	8%		3%	9%				1%	48%
PM Peak Hour	15:00	14:00	16:00	12:00	14:00	12:00		14:00	13:00				12:00	15:00
Volume	1	11	6	3	7	6		5	12				1	39

Summary	Total				
Trucks & Busses:	Class (#4 thru #13):	248	% Trucks & Busses: 64%	% of Trucks & Busses AM: 57%	% of Trucks & Busses PM: 125%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-001W

Date: 7/20/2005

Location: Ave F btwn Division St and 10th St

#1

WESTBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	1	0		0	0	0	0	0	0	0	0	0	1
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	1	0	0	0	4	0	0	0	0	7
05:00	0	4	1	0	0	1	3	0	8	0	0	0	0	17
06:00	0	4	1	0	3	8	1	0	15	0	0	0	0	32
07:00	0	5	0	1	2	4	1	0	11	0	0	0	0	24
08:00	0	8	3	0	4	3	1	6	4	0	0	0	0	29
09:00	0	7	3	0	3	4	4	3	5	0	0	0	0	29
10:00	0	4	4	2	6	5	1	1	11	0	0	0	0	34
11:00	0	7	5	3	4	6	2	2	7	0	0	0	0	36
12:00 PM	0	4	4	1	4	1	2	2	8	0	0	0	0	26
13:00	0	9	7	0	6	5	2	3	13	0	0	0	0	45
14:00	0	9	3	0	4	2	3	1	10	0	0	0	0	32
15:00	0	7	3	2	5	5	1	3	2	0	0	0	0	28
16:00	0	6	2	0	0	4	1	1	1	0	0	0	0	15
17:00	0	2	1	0	1	0	0	1	0	0	0	0	0	5
18:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Totals		**84**	**40**	**9**	**43**	**48**	**22**	**23**	**99**					**368**
% of Totals		23%	11%	2%	12%	13%	6%	6%	27%					100%
% AM		11%	5%	2%	6%	8%	4%	3%	18%					57%
AM Peak Hour		08:00	11:00	11:00	10:00	06:00	09:00	08:00	06:00					11:00
Volume		8	5	3	6	8	4	6	15					36
% PM		12%	6%	1%	5%	5%	2%	3%	9%					43%
PM Peak Hour		13:00	13:00	15:00	13:00	13:00	14:00	13:00	13:00					13:00
Volume		9	7	2	6	5	3	3	13					45

Summary	Total	
Trucks & Busses:	Class (#4 thru #13):	244

% Trucks & Busses: 66%

% of Trucks & Busses AM: 61%

% of Trucks & Busses PM: 134%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-002s

Date: 7/20/2005

Location: Divison St btwn Ave F and Ave G

#2

SOUTHBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	1	4	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
04:00	0	6	0	0	0	0	0	0	4	0	0	0	0	10
05:00	0	18	5	0	1	0	3	2	8	0	0	0	0	37
06:00	0	26	5	0	3	9	1	0	13	0	0	0	1	58
07:00	0	15	6	0	3	4	1	0	9	0	0	0	0	38
08:00	0	12	6	0	2	3	0	3	1	0	0	1	0	28
09:00	0	18	4	0	4	5	2	3	4	0	0	0	0	40
10:00	0	19	6	0	9	5	0	1	7	0	0	0	1	48
11:00	0	20	6	3	5	7	1	4	2	0	0	0	0	48
12:00 PM	0	11	5	1	4	1	2	4	9	1	0	0	0	38
13:00	1	20	7	0	6	7	1	3	13	0	0	0	0	58
14:00	0	23	7	0	6	3	2	2	11	0	0	0	1	55
15:00	0	16	8	2	5	3	2	2	1	0	0	0	0	39
16:00	0	26	5	0	1	4	1	1	1	0	0	0	0	39
17:00	0	20	6	1	0	0	0	1	0	0	0	0	0	28
18:00	0	23	2	0	0	0	0	0	0	0	0	0	0	25
19:00	0	19	1	0	2	0	0	0	0	0	0	0	0	22
20:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
21:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18
22:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
23:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
Totals	**3**	**338**	**82**	**7**	**52**	**51**	**16**	**26**	**84**	**1**		**1**	**3**	**664**
% of Totals	0%	51%	12%	1%	8%	8%	2%	4%	13%	0%		0%	0%	100%
% AM	0%	21%	6%	0%	4%	5%	1%	2%	7%			0%	0%	48%
AM Peak Hour		06:00	07:00	11:00	10:00	06:00	05:00	11:00	06:00			08:00	06:00	06:00
Volume	1	26	6	3	9	9	3	4	13			1	1	58
% PM	0%	30%	6%	1%	4%	3%	1%	2%	5%	0%			0%	52%
PM Peak Hour	13:00	16:00	15:00	15:00	13:00	13:00	12:00	12:00	13:00	12:00			14:00	13:00
Volume	1	26	8	2	6	7	2	4	13	1			1	58

Summary	Total				
Trucks & Busses:	Class (#4 thru #13):	241	% Trucks & Busses: 36%	% of Trucks & Busses AM: 56%	% of Trucks & Busses PM: 216%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B27

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-002n

Date: 7/20/2005

Location: Divison St btwn Ave F and Ave G

#2

NORTHBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	7	2	0	0	1	0	0	3	0	0	0	0	13
06:00	0	10	4	2	3	9	0	0	14	0	0	0	0	42
07:00	1	18	5	1	3	5	0	0	10	0	0	0	1	44
08:00	0	24	6	1	1	4	0	3	11	0	0	0	1	51
09:00	0	12	11	0	3	8	0	5	9	0	0	0	0	48
10:00	0	28	9	1	10	7	0	1	7	0	0	0	0	63
11:00	0	28	10	1	9	6	0	3	8	0	0	0	0	65
12:00 PM	0	12	10	3	7	4	0	2	10	0	0	0	0	48
13:00	0	18	7	0	10	8	0	1	14	0	0	0	0	58
14:00	0	26	9	1	7	7	0	5	8	0	0	0	0	63
15:00	1	28	11	1	6	4	0	5	8	0	0	0	1	65
16:00	2	38	9	1	6	5	0	0	2	0	0	0	0	63
17:00	0	27	8	0	2	6	0	0	0	0	0	0	0	43
18:00	0	25	4	0	2	0	0	0	0	0	0	0	0	31
19:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
20:00	0	8	0	0	0	0	0	1	0	0	0	0	0	9
21:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:00	1	5	0	0	0	0	0	0	0	0	0	0	0	6
23:00	0	9	0	0	0	0	0	1	1	0	0	0	0	11
Totals	**5**	**354**	**108**	**12**	**70**	**74**		**27**	**105**				**3**	**758**
% of Totals	1%	47%	14%	2%	9%	10%		4%	14%				0%	100%
% AM	0%	18%	6%	1%	4%	5%		2%	8%				0%	45%
AM Peak Hour	07:00	10:00	09:00	06:00	10:00	06:00		09:00	06:00				07:00	11:00
Volume	1	28	11	2	10	9		5	14				1	65
% PM	1%	28%	8%	1%	5%	4%		2%	6%				0%	55%
PM Peak Hour	16:00	16:00	15:00	12:00	13:00	13:00		14:00	13:00				15:00	15:00
Volume	2	38	11	3	10	8		5	14				1	65

Summary	Total	
Trucks & Busses:	Class (#4 thru #13):	291

% Trucks & Busses: 38%

% of Trucks & Busses AM: 52%

% of Trucks & Busses PM: 191%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B28

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-003s

Date: 7/20/2005

Location: 10th St E btwn Ave F and Ave G

#3

SOUTHBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	2	2	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
05:00	0	27	1	0	1	0	0	0	0	0	0	0	0	29
06:00	0	67	10	3	6	0	0	0	1	1	0	0	0	88
07:00	0	43	6	0	2	0	0	2	0	0	0	0	0	53
08:00	1	23	3	0	1	1	0	1	1	0	0	0	0	31
09:00	0	11	4	0	1	1	2	0	0	0	1	0	0	20
10:00	0	4	0	2	3	3	2	0	1	0	0	0	0	15
11:00	0	5	3	0	1	3	0	0	0	0	0	0	0	12
12:00 PM	0	15	2	0	4	1	0	0	1	0	0	0	0	23
13:00	1	10	1	1	3	1	1	0	0	0	0	0	0	18
14:00	0	15	4	0	4	4	2	0	0	0	0	0	0	29
15:00	1	10	1	0	1	1	1	0	0	0	0	0	0	15
16:00	0	6	6	0	5	1	2	0	0	0	0	0	0	20
17:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
18:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
19:00	1	11	2	0	0	0	0	0	0	0	0	0	0	14
20:00	2	7	0	0	0	0	0	0	0	0	0	0	0	9
21:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
22:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10
23:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
Totals	**8**	**304**	**55**	**6**	**34**	**16**	**10**	**3**	**4**	**1**	**1**			**442**
% of Totals	2%	69%	12%	1%	8%	4%	2%	1%	1%	0%	0%			100%
% AM	1%	44%	7%	1%	3%	2%	1%	1%	1%	0%	0%			60%
AM Peak Hour		06:00	06:00	06:00	06:00	10:00	09:00	07:00	06:00	06:00	09:00			06:00
Volume	2	67	10	3	6	3	2	2	1	1	1			88
% PM	1%	25%	6%	0%	4%	2%	1%		0%					40%
PM Peak Hour	20:00	12:00	16:00	13:00	16:00	14:00	14:00		12:00					14:00
Volume	2	15	6	1	5	4	2		1					29

Summary Trucks & Busses:	Total Class (#4 thru #13):	75	% Trucks & Busses: 17%	% of Trucks & Busses AM: 53%	% of Trucks & Busses PM: 627%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B29

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-003n

Date: 7/20/2005

Location: 10th St E btwn Ave F and Ave G

#3

NORTHBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	1	1	2	0	0	0	0	0	0	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	14	2	0	1	1	0	0	0	0	0	0	0	18
07:00	0	21	3	1	2	1	0	1	0	0	0	0	0	29
08:00	2	12	8	0	4	1	0	1	4	2	0	0	1	35
09:00	0	21	6	0	5	1	0	2	8	0	0	0	0	43
10:00	1	23	4	0	1	2	0	2	2	2	0	0	0	37
11:00	2	25	5	1	7	4	2	0	2	0	0	0	0	48
12:00 PM	0	29	1	0	1	5	1	1	2	0	0	0	0	40
13:00	2	19	3	0	2	1	1	2	0	0	0	0	0	30
14:00	0	38	9	0	7	0	2	1	3	0	0	0	0	60
15:00	8	79	13	2	10	6	2	0	0	0	0	0	0	120
16:00	2	76	9	0	4	2	0	1	1	0	0	0	0	95
17:00	4	44	3	0	2	3	0	2	1	0	0	0	0	59
18:00	1	21	1	0	1	1	0	0	0	0	0	0	0	25
19:00	1	11	2	0	0	1	0	0	2	0	0	0	0	17
20:00	2	5	1	0	1	1	0	0	0	0	0	0	0	10
21:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
Totals	**26**	**461**	**76**	**4**	**49**	**30**	**8**	**13**	**25**	**4**			**1**	**697**
% of Totals	4%	66%	11%	1%	7%	4%	1%	2%	4%	1%			0%	100%
% AM	1%	18%	4%	0%	3%	1%	0%	1%	2%	1%			0%	32%
AM Peak Hour	08:00	11:00	08:00	07:00	11:00	11:00	11:00	09:00	09:00	08:00			08:00	11:00
Volume	2	25	8	1	7	4	2	2	8	2			1	48
% PM	3%	48%	6%	0%	4%	3%	1%	1%	1%					68%
PM Peak Hour	15:00	15:00	15:00	15:00	15:00	15:00	14:00	13:00	14:00					15:00
Volume	8	79	13	2	10	6	2	2	3					120

Summary Trucks & Busses:	Total Class (#4 thru #13):	134

% Trucks & Busses: 19%

% of Trucks & Busses AM: 46%

% of Trucks & Busses PM: 287%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B 30

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-004e

Date: 7/20/2005

Location: Ave G btwn Division St and 10th St E

#4

EASTBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	6	1	0	0	0	0	1	0	0	0	0	0	8
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
05:00	0	16	1	0	3	0	0	0	0	0	0	0	0	20
06:00	1	28	2	0	4	0	1	0	0	0	0	0	1	37
07:00	0	53	8	0	3	1	0	0	2	0	0	0	0	67
08:00	0	35	8	0	1	1	0	1	21	0	0	1	0	68
09:00	1	42	5	0	1	2	0	3	17	0	0	2	0	73
10:00	0	40	4	1	1	2	0	2	16	0	0	0	0	66
11:00	1	42	4	0	7	1	0	0	12	0	0	1	0	68
12:00 PM	0	37	5	0	5	3	0	1	11	0	0	0	0	62
13:00	1	22	4	0	1	1	0	1	12	0	0	1	0	43
14:00	0	52	9	1	6	2	0	2	13	0	0	1	0	86
15:00	2	77	11	1	10	0	0	0	7	0	0	0	0	108
16:00	0	63	9	0	7	0	0	0	6	0	0	0	0	85
17:00	0	53	8	0	3	0	0	1	4	0	0	0	0	69
18:00	1	27	2	0	2	0	0	0	3	0	0	1	0	36
19:00	0	23	5	0	1	0	0	0	2	0	1	0	0	32
20:00	0	24	3	0	2	0	0	0	0	0	0	0	0	29
21:00	1	14	0	0	3	0	0	0	0	0	0	0	0	18
22:00	0	8	1	0	1	0	0	0	0	0	0	0	0	10
23:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Totals	**8**	**678**	**92**	**3**	**61**	**13**	**1**	**12**	**126**		**1**	**7**	**1**	**1003**
% of Totals	1%	68%	9%	0%	6%	1%	0%	1%	13%		0%	1%	0%	100%
% AM	0%	27%	3%	0%	2%	1%	0%	1%	7%			0%	0%	42%
AM Peak Hour	06:00	07:00	07:00	10:00	11:00	09:00	06:00	09:00	08:00			09:00	06:00	09:00
Volume	1	53	8	1	7	2	1	3	21			2	1	73
% PM	0%	41%	6%	0%	4%	1%		0%	6%		0%	0%		58%
PM Peak Hour	15:00	15:00	15:00	14:00	15:00	12:00		14:00	14:00		19:00	13:00		15:00
Volume	2	77	11	1	10	3		2	13		1	1		108

Summary	Total	
Trucks & Busses:	Class (#4 thru #13):	225

% Trucks & Busses: 22%

% of Trucks & Busses AM: 48%

% of Trucks & Busses PM: 343%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B31

Daily Classification Report

Prepared by: Southland Car Counters

Project #: 05-2277-004w

Date: 7/20/2005

Location: Ave G btwn Division St and 10th St E

#4

WESTBOUND

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
05:00	0	31	7	0	4	0	0	0	2	0	0	0	0	44
06:00	0	98	17	1	9	2	0	1	5	1	0	0	0	134
07:00	0	73	12	0	9	2	0	0	7	0	0	0	2	105
08:00	0	40	6	0	4	2	0	5	14	0	0	0	0	71
09:00	0	19	7	0	2	2	0	3	14	0	1	0	0	48
10:00	0	13	3	0	5	1	0	1	7	1	0	0	0	31
11:00	0	30	2	0	8	1	0	1	10	0	0	0	0	52
12:00 PM	1	36	11	0	2	3	0	0	17	0	0	0	0	70
13:00	0	35	6	0	7	1	0	3	13	0	1	1	2	69
14:00	0	34	6	0	6	3	0	0	10	0	0	0	1	60
15:00	2	22	12	1	5	0	0	0	10	0	0	0	0	52
16:00	1	34	8	0	6	0	0	2	6	0	0	0	0	57
17:00	0	33	5	0	4	0	0	0	2	0	0	0	0	44
18:00	0	40	6	0	2	0	0	0	2	0	0	0	0	50
19:00	0	31	6	0	5	0	0	0	1	0	0	0	0	43
20:00	1	21	2	0	1	0	0	0	0	0	0	0	0	25
21:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
22:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
23:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
Totals	**5**	**635**	**119**	**2**	**81**	**17**		**16**	**120**	**2**	**2**	**1**	**5**	**1005**
% of Totals	0%	63%	12%	0%	8%	2%		2%	12%	0%	0%	0%	0%	100%
% AM		32%	5%	0%	4%	1%		1%	6%	0%	0%		0%	50%
AM Peak Hour		06:00	06:00	06:00	06:00	06:00		08:00	08:00	06:00	09:00		07:00	06:00
Volume		98	17	1	9	2		5	14	1	1		2	134
% PM	0%	31%	6%	0%	4%	1%		0%	6%		0%	0%	0%	50%
PM Peak Hour	15:00	18:00	15:00	15:00	13:00	12:00		13:00	12:00		13:00	13:00	13:00	12:00
Volume	2	40	12	1	7	3		3	17		1	1	2	70

Summary	Total	
Trucks & Busses:	Class (#4 thru #13):	246

% Trucks & Busses: 24%

% of Trucks & Busses AM: 52%

% of Trucks & Busses PM: 368%

#1 Motorcycles - 2 Axles
#2 Passenger Cars - 2 Axles
#3 Pickup Trucks, Vans, - 2 Axl
#4 Busses
#5 Single Unit - 2 Axles, 6 Tires
#6 Single Unit Truck - 3 Axles
#7 Single Unit - 4 Axles
#8 Double Unit - <5 Axles
#9 Double Unit - 5 Axles
#10 Double Unit - >5 Axles
#11 Multi-Unit 6 Axles
#12 Multi-Unit <6 Axles
#13 Multi-Unit >6 Axles

B32

APPENDIX C

INTERSECTION PEAK HOUR LEVEL OF SERVICE WORKSHEETS

YEAR 2006

INTERSECTION PEAK HOUR LEVEL OF SERVICE WORKSHEETS WITH AVENUE F EXTENSION

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU1.WK4

SR-14 SB Ramps @ Avenue F
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Eb Thru	24	1	1600	0.038 *	1	25	1	1600	0.039 *	0	25	1	1600	0.039 *	0	25	1	1600	0.039	0	25	1	1600	0.039
Eb Right	36	0	0	-	1	37	0	0	-	0	37	0	0	-	0	37	0	0	-	0	37	0	0	-
Wb Left	5	0	0	0.000 *	0	5	0	0	0.000 *	0	5	0	0	0.000 *	0	5	0	0	0.000	0	5	0	0	0.000
Wb Thru	21	1	1600	0.033	1	22	1	1600	0.034	0	22	1	1600	0.034	0	22	1	1600	0.039	0	22	1	1600	0.039
Wb Right	26	0	0	-	1	27	0	0	-	0	27	0	0	-	8	35	0	0	-	0	35	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.141					0.142					0.142					0.142					0.142
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C1

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU1.WK4

SR-14 SB Ramps @ Avenue F
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	10	1	1600	0.031	0	10	1	1600	0.032	0	10	1	1600	0.032	0	10	1	1600	0.032	0	10	1	1600	0.032
Eb Right	39	0	0	-	1	40	0	0	-	0	40	0	0	-	0	40	0	0	-	0	40	0	0	-
Wb Left	18	0	0	0.000	1	19	0	0	0.000	0	19	0	0	0.000	0	19	0	0	0.000	0	19	0	0	0.000
Wb Thru	87	1	1600	0.096 *	3	90	1	1600	0.100 *	0	90	1	1600	0.100 *	0	90	1	1600	0.111 *	0	90	1	1600	0.111 *
Wb Right	49	0	0	-	2	51	0	0	-	0	51	0	0	-	17	68	0	0	-	0	68	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.199					0.203					0.203					0.214					0.214
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.011
Significant Impact: NO

Area Traffic Mitigation:

C2

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU2.WK4

SR-14 NB Ramps @ Avenue F
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	19	1	1600	0.012	1	20	1	1600	0.012	0	20	1	1600	0.012	0	20	1	1600	0.012	0	20	1	1600	0.012
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	28	1	1600	0.018 *	1	29	1	1600	0.018 *	0	29	1	1600	0.018 *	23	52	1	1600	0.033 *	0	52	1	1600	0.033 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	14	1	1600	0.013	1	15	1	1600	0.013	0	15	1	1600	0.013	0	15	1	1600	0.013	0	15	1	1600	0.013
Eb Right	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	19	1	1600	0.016 *	1	20	1	1600	0.016 *	0	20	1	1600	0.016 *	8	28	1	1600	0.021 *	0	28	1	1600	0.021 *
Wb Right	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.134					0.134					0.134					0.154					0.154
LOS				A					A					A					A					A

C3

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.020
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

SR-14 NB Ramps @ Avenue F

N-S St: SR-14 NB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU2.WK4

Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	57	1	1600	0.036	2	59	1	1600	0.037	0	59	1	1600	0.037	0	59	1	1600	0.037	0	59	1	1600	0.037
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	25	1	1600	0.016	1	26	1	1600	0.016	0	26	1	1600	0.016	9	35	1	1600	0.022	0	35	1	1600	0.022
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008
Eb Right	1	0	0	-	0	1	0	0	-	0	1	0	0	-	0	1	0	0	-	0	1	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	95	1	1600	0.062 *	4	99	1	1600	0.064 *	0	99	1	1600	0.064 *	17	116	1	1600	0.075 *	0	116	1	1600	0.075 *
Wb Right	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.198					0.201					0.201					0.212					0.212
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.011
Significant Impact: NO

Area Traffic Mitigation:

h7

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU3.WK4

SR-14 SB Ramps @ Avenue G
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	26	1	1600	0.016	1	27	1	1600	0.017	0	27	1	1600	0.017	0	27	1	1600	0.017	0	27	1	1600	0.017
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	49	1	1600	0.048	2	51	1	1600	0.049	4	55	1	1600	0.055	1	56	1	1600	0.056	0	56	1	1600	0.056
Eb Right	27	0	0	-	1	28	0	0	-	5	33	0	0	-	0	33	0	0	-	0	33	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	51	1	1600	0.048	2	53	1	1600	0.049	28	81	1	1600	0.067 *	1	82	1	1600	0.067 *	0	82	1	1600	0.067 *
Wb Right	25	0	0	-	1	26	0	0	-	0	26	0	0	-	0	26	0	0	-	0	26	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.164					0.166					0.184					0.184					0.184
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

57

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU3.WK4

SR-14 SB Ramps @ Avenue G
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	29	1	1600	0.018 *	1	30	1	1600	0.019 *	0	30	1	1600	0.019 *	0	30	1	1600	0.019 *	0	30	1	1600	0.019 *
Eb Left	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000
Eb Thru	32	1	1600	0.041	1	33	1	1600	0.043	13	46	1	1600	0.063	1	47	1	1600	0.063	0	47	1	1600	0.063
Eb Right	33	0	0	-	1	34	0	0	-	19	53	0	0	-	0	53	0	0	-	0	53	0	0	-
Wb Left	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000
Wb Thru	72	1	1600	0.064 *	3	75	1	1600	0.067 *	18	93	1	1600	0.078 *	1	94	1	1600	0.079 *	0	94	1	1600	0.079 *
Wb Right	30	0	0	-	1	31	0	0	-	0	31	0	0	-	0	31	0	0	-	0	31	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.182					0.186					0.197					0.198					0.198
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.001
Significant Impact: NO

Area Traffic Mitigation:

C 9

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU4.WK4

SR-14 NB Ramps @ Avenue G
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	28	1	1600	0.018	1	29	1	1600	0.018	17	46	1	1600	0.029	0	46	1	1600	0.029	0	46	1	1600	0.029
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	60	1	1600	0.038 *	2	62	1	1600	0.039 *	0	62	1	1600	0.039 *	0	62	1	1600	0.039 *	0	62	1	1600	0.039 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Eb Thru	66	1	1600	0.048 *	3	69	1	1600	0.049 *	4	73	1	1600	0.052 *	1	74	1	1600	0.052 *	0	74	1	1600	0.052 *
Eb Right	10	0	0	-	0	10	0	0	-	0	10	0	0	-	0	10	0	0	-	0	10	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	45	1	1600	0.036	2	47	1	1600	0.038	11	58	1	1600	0.045	1	59	1	1600	0.045	0	59	1	1600	0.045
Wb Right	13	0	0	-	0	13	0	0	-	0	13	0	0	-	0	13	0	0	-	0	13	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.186					0.188					0.191					0.191					0.191
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C7

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU4.WK4

SR-14 NB Ramps @ Avenue G
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	32	1	1600	0.020	1	33	1	1600	0.021	11	44	1	1600	0.028	0	44	1	1600	0.028	0	44	1	1600	0.028
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	42	1	1600	0.029	2	44	1	1600	0.030	13	57	1	1600	0.038	1	58	1	1600	0.039	0	58	1	1600	0.039
Eb Right	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	68	1	1600	0.069 *	3	71	1	1600	0.072 *	7	78	1	1600	0.076 *	1	79	1	1600	0.077 *	0	79	1	1600	0.077 *
Wb Right	43	0	0	-	2	45	0	0	-	0	45	0	0	-	0	45	0	0	-	0	45	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.189					0.193					0.204					0.205					0.205
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.001
Significant Impact: NO

Area Traffic Mitigation:

C8

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU5.WK4

SR-14 SB Ramps @ Avenue H
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	118	1	1600	0.074	4	122	1	1600	0.077	9	131	1	1600	0.082	0	131	1	1600	0.082	0	131	1	1600	0.082
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	27	1	1600	0.017	1	28	1	1600	0.018	0	28	1	1600	0.018	0	28	1	1600	0.018	0	28	1	1600	0.018
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	137	3	4800	0.034	5	142	3	4800	0.035	9	151	3	4800	0.037	2	153	3	4800	0.038	0	153	3	4800	0.038
Eb Right	26	0	0	-	1	27	0	0	-	0	27	0	0	-	0	27	0	0	-	0	27	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	111	2	3200	0.035 *	4	115	2	3200	0.036 *	28	143	2	3200	0.045 *	1	144	2	3200	0.045 *	0	144	2	3200	0.080 *
Wb Right	104	FREE	999999	0.000	4	108	FREE	999999	0.000	0	108	FREE	999999	0.000	4	112	FREE	999999	0.000	0	112	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.209					0.213					0.227					0.227					0.262
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C9

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU5.WK4

SR-14 SB Ramps @ Avenue H
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	203	1	1600	0.127	8	211	1	1600	0.132	30	241	1	1600	0.150	0	241	1	1600	0.150	0	241	1	1600	0.150
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	32	1	1600	0.020	1	33	1	1600	0.021	0	33	1	1600	0.021	0	33	1	1600	0.021	0	33	1	1600	0.021
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000 *
Eb Thru	166	3	4800	0.050 *	6	172	3	4800	0.052 *	32	204	3	4800	0.059 *	1	205	3	4800	0.059 *	0	205	3	4800	0.059
Eb Right	75	0	0	-	3	78	0	0	-	0	78	0	0	-	0	78	0	0	-	0	78	0	0	-
Wb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000
Wb Thru	148	2	3200	0.046	6	154	2	3200	0.048	18	172	2	3200	0.054	2	174	2	3200	0.054	0	174	2	3200	0.093 *
Wb Right	115	FREE	999999	0.000	4	119	FREE	999999	0.000	0	119	FREE	999999	0.000	6	125	FREE	999999	0.000	0	125	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.277					0.284					0.309					0.309					0.343
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C10

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU6.WK4

SR-14 NB Ramps @ Avenue H
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	30	2	2880	0.010	1	31	2	2880	0.011	0	31	2	2880	0.011	0	31	2	2880	0.011	0	31	2	2880	0.011
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	68	1	1600	0.043 *	3	71	1	1600	0.044 *	0	71	1	1600	0.044 *	8	79	1	1600	0.049 *	0	79	1	1600	0.049 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	241	3	4800	0.054	9	250	3	4800	0.056	19	269	3	4800	0.060	2	271	3	4800	0.060	0	271	3	4800	0.060
Eb Right	16	0	0	-	1	17	0	0	-	0	17	0	0	-	0	17	0	0	-	0	17	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	193	2	3200	0.060 *	7	200	2	3200	0.063 *	28	228	2	3200	0.071 *	5	233	2	3200	0.073 *	0	233	2	3200	0.073 *
Wb Right	65	1	1600	0.041	2	67	1	1600	0.042	27	94	1	1600	0.059	0	94	1	1600	0.059	0	94	1	1600	0.059
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.203					0.207					0.215					0.222					0.222
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.007
Significant Impact: NO

Area Traffic Mitigation:

C 11

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU6.WK4

SR-14 NB Ramps @ Avenue H
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	52	2	2880	0.018	2	54	2	2880	0.019	0	54	2	2880	0.019	0	54	2	2880	0.019	0	54	2	2880	0.019
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	134	1	1600	0.084 *	5	139	1	1600	0.087 *	0	139	1	1600	0.087 *	3	142	1	1600	0.089 *	0	142	1	1600	0.089 *
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	280	3	4800	0.063	11	291	3	4800	0.066	63	354	3	4800	0.079	1	355	3	4800	0.079	0	355	3	4800	0.079
Eb Right	23	0	0	-	1	24	0	0	-	0	24	0	0	-	0	24	0	0	-	0	24	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	227	2	3200	0.071	9	236	2	3200	0.074	18	254	2	3200	0.079	8	262	2	3200	0.082	0	262	2	3200	0.082
Wb Right	116	1	1600	0.073 *	4	120	1	1600	0.075 *	18	138	1	1600	0.087 *	0	138	1	1600	0.087 *	0	138	1	1600	0.087 *
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.257					0.262					0.274					0.276					0.276
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.002
Significant Impact: NO

Area Traffic Mitigation:

C12

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU7.WK4

SR-14 SB Ramps @ Avenue I
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	23	1	1600	0.014	1	24	1	1600	0.015	2	26	1	1600	0.016	0	26	1	1600	0.016	0	26	1	1600	0.016
Sb Thru	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008
Sb Right	27	1	1600	0.017 *	1	28	1	1600	0.018 *	0	28	1	1600	0.018 *	0	28	1	1600	0.018 *	0	28	1	1600	0.018 *
Eb Left	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001
Eb Thru	311	2	3200	0.097 *	12	323	2	3200	0.101 *	11	334	2	3200	0.104 *	0	334	2	3200	0.104 *	0	334	2	3200	0.104 *
Eb Right	72	1	1600	0.045	3	75	1	1600	0.047	0	75	1	1600	0.047	0	75	1	1600	0.047	0	75	1	1600	0.047
Wb Left	341	1	1600	0.213 *	13	354	1	1600	0.221 *	155	509	1	1600	0.318 *	0	509	1	1600	0.318 *	0	509	1	1600	0.318 *
Wb Thru	557	2	3200	0.174	21	578	2	3200	0.181	32	610	2	3200	0.191	0	610	2	3200	0.191	0	610	2	3200	0.191
Wb Right	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.426					0.439					0.539					0.539					0.539
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU7.WK4

SR-14 SB Ramps @ Avenue I
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	31	1	1600	0.019	1	32	1	1600	0.020	8	40	1	1600	0.025	0	40	1	1600	0.025	0	40	1	1600	0.025
Sb Thru	37	1	1600	0.023 *	1	38	1	1600	0.024 *	0	38	1	1600	0.024	0	38	1	1600	0.024	0	38	1	1600	0.024
Sb Right	22	1	1600	0.014	1	23	1	1600	0.014	0	23	1	1600	0.014	0	23	1	1600	0.014	0	23	1	1600	0.014
Eb Left	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003
Eb Thru	729	2	3200	0.228 *	28	757	2	3200	0.236 *	35	792	2	3200	0.247 *	0	792	2	3200	0.247 *	0	792	2	3200	0.247 *
Eb Right	185	1	1600	0.116	7	192	1	1600	0.120	0	192	1	1600	0.120	0	192	1	1600	0.120	0	192	1	1600	0.120
Wb Left	241	1	1600	0.151 *	9	250	1	1600	0.156 *	103	353	1	1600	0.221 *	0	353	1	1600	0.221 *	0	353	1	1600	0.221 *
Wb Thru	707	2	3200	0.221	27	734	2	3200	0.229	20	754	2	3200	0.236	0	754	2	3200	0.236	0	754	2	3200	0.236
Wb Right	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.502					0.516					0.593					0.593					0.593
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU8.WK4

SR-14 NB Ramps @ Avenue I
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	219	1	1600	0.137	8	227	1	1600	0.142	0	227	1	1600	0.142	0	227	1	1600	0.142	0	227	1	1600	0.142
Nb Thru	2	1	1600	0.104	0	2	1	1600	0.108	0	2	1	1600	0.140	0	2	1	1600	0.140	0	2	1	1600	0.140
Nb Right	164	0	0	-	6	170	0	0	-	52	222	0	0	-	0	222	0	0	-	0	222	0	0	-
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	52	1	1600	0.033 *	2	54	1	1600	0.034 *	0	54	1	1600	0.034 *	0	54	1	1600	0.034 *	0	54	1	1600	0.034 *
Eb Thru	341	2	3200	0.107	13	354	2	3200	0.111	13	367	2	3200	0.115	0	367	2	3200	0.115	0	367	2	3200	0.115
Eb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	702	2	3200	0.219 *	27	729	2	3200	0.228 *	187	916	2	3200	0.286 *	0	916	2	3200	0.286 *	0	916	2	3200	0.311 *
Wb Right	69	FREE	999999	0.000	3	72	FREE	999999	0.000	7	79	FREE	999999	0.000	0	79	FREE	999999	0.000	0	79	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.489					0.504					0.562					0.562					0.587
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- With Avenue F Extension
File: N:\2600\2052684\ICU\ICU8.WK4

SR-14 NB Ramps @ Avenue I
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	255	1	1600	0.159	10	265	1	1600	0.165	0	265	1	1600	0.165	0	265	1	1600	0.165	0	265	1	1600	0.165
Nb Thru	2	1	1600	0.283 *	0	2	1	1600	0.293 *	0	2	1	1600	0.403 *	0	2	1	1600	0.403 *	0	2	1	1600	0.403 *
Nb Right	450	0	0	-	17	467	0	0	-	176	643	0	0	-	0	643	0	0	-	0	643	0	0	-
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	144	1	1600	0.090 *	5	149	1	1600	0.093 *	0	149	1	1600	0.093 *	0	149	1	1600	0.093 *	0	149	1	1600	0.093 *
Eb Thru	608	2	3200	0.190	23	631	2	3200	0.197	43	674	2	3200	0.211	0	674	2	3200	0.211	0	674	2	3200	0.211
Eb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	792	2	3200	0.248 *	30	822	2	3200	0.257 *	124	946	2	3200	0.296 *	0	946	2	3200	0.296 *	0	946	2	3200	0.338 *
Wb Right	128	FREE	999999	0.000	5	133	FREE	999999	0.000	4	137	FREE	999999	0.000	0	137	FREE	999999	0.000	0	137	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.721					0.743					0.892					0.892					0.934
LOS				C					C					D					D					E

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C16

YEAR 2006

INTERSECTION PEAK HOUR LEVEL OF SERVICE WORKSHEETS WITHOUT AVENUE F EXTENSION

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU1.WK4

SR-14 SB Ramps @ Avenue F
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000	0	0	1	1600	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *	0	4	1	1600	0.003 *
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Eb Thru	24	1	1600	0.038 *	1	25	1	1600	0.039 *	0	25	1	1600	0.039 *	0	25	1	1600	0.039 *	0	25	1	1600	0.039 *
Eb Right	36	0	0	-	1	37	0	0	-	0	37	0	0	-	0	37	0	0	-	0	37	0	0	-
Wb Left	5	0	0	0.000 *	0	5	0	0	0.000 *	0	5	0	0	0.000 *	0	5	0	0	0.000 *	0	5	0	0	0.000 *
Wb Thru	21	1	1600	0.033	1	22	1	1600	0.034	0	22	1	1600	0.034	0	22	1	1600	0.034	0	22	1	1600	0.034
Wb Right	26	0	0	-	1	27	0	0	-	0	27	0	0	-	0	27	0	0	-	0	27	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.141					0.142					0.142					0.142					0.142
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C17

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU1.WK4

SR-14 SB Ramps @ Avenue F
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003	0	4	1	1600	0.003
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002	0	3	1	1600	0.002
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	10	1	1600	0.031	0	10	1	1600	0.032	0	10	1	1600	0.032	0	10	1	1600	0.032	0	10	1	1600	0.032
Eb Right	39	0	0	-	1	40	0	0	-	0	40	0	0	-	0	40	0	0	-	0	40	0	0	-
Wb Left	18	0	0	0.000	1	19	0	0	0.000	0	19	0	0	0.000	0	19	0	0	0.000	0	19	0	0	0.000
Wb Thru	87	1	1600	0.096 *	3	90	1	1600	0.100 *	0	90	1	1600	0.100 *	0	90	1	1600	0.100 *	0	90	1	1600	0.100 *
Wb Right	49	0	0	-	2	51	0	0	-	0	51	0	0	-	0	51	0	0	-	0	51	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.199					0.203					0.203					0.203					0.203
LOS				A					A					A					A					A

817

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU2.WK4

SR-14 NB Ramps @ Avenue F
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	19	1	1600	0.012	1	20	1	1600	0.012	0	20	1	1600	0.012	0	20	1	1600	0.012	0	20	1	1600	0.012
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	28	1	1600	0.018 *	1	29	1	1600	0.018 *	0	29	1	1600	0.018 *	0	29	1	1600	0.018 *	0	29	1	1600	0.018 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	14	1	1600	0.013	1	15	1	1600	0.013	0	15	1	1600	0.013	0	15	1	1600	0.013	0	15	1	1600	0.013
Eb Right	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	19	1	1600	0.016 *	1	20	1	1600	0.016 *	0	20	1	1600	0.016 *	0	20	1	1600	0.016 *	0	20	1	1600	0.016 *
Wb Right	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-	0	6	0	0	-
Yellow Allowance:				**0.100 ***					**0.100 ***					**0.100 ***					**0.100 ***					**0.100 ***
ICU				**0.134**					**0.134**					**0.134**					**0.134**					**0.134**
LOS				**A**					**A**					**A**					**A**					**A**

C19

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue F
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU2.WK4

SR-14 NB Ramps @ Avenue F
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	57	1	1600	0.036	2	59	1	1600	0.037	0	59	1	1600	0.037	0	59	1	1600	0.037	0	59	1	1600	0.037
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	25	1	1600	0.016	1	26	1	1600	0.016	0	26	1	1600	0.016	0	26	1	1600	0.016	0	26	1	1600	0.016
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008	0	11	1	1600	0.008
Eb Right	1	0	0	-	0	1	0	0	-	0	1	0	0	-	0	1	0	0	-	0	1	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	95	1	1600	0.062 *	4	99	1	1600	0.064 *	0	99	1	1600	0.064 *	0	99	1	1600	0.064 *	0	99	1	1600	0.064 *
Wb Right	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.198					0.201					0.201					0.201					0.201
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C20

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU3.WK4

SR-14 SB Ramps @ Avenue G
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	26	1	1600	0.016	1	27	1	1600	0.017	0	27	1	1600	0.017	0	27	1	1600	0.017	0	27	1	1600	0.017
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007	0	11	1	1600	0.007
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	49	1	1600	0.048	2	51	1	1600	0.049	4	55	1	1600	0.055	1	56	1	1600	0.056	0	56	1	1600	0.056
Eb Right	27	0	0	-	1	28	0	0	-	5	33	0	0	-	0	33	0	0	-	0	33	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	51	1	1600	0.048	2	53	1	1600	0.049	28	81	1	1600	0.067 *	1	82	1	1600	0.067 *	0	82	1	1600	0.067 *
Wb Right	25	0	0	-	1	26	0	0	-	0	26	0	0	-	0	26	0	0	-	0	26	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.164					0.166					0.184					0.184					0.184
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C21

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU3.WK4

SR-14 SB Ramps @ Avenue G
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	29	1	1600	0.018 *	1	30	1	1600	0.019 *	0	30	1	1600	0.019 *	0	30	1	1600	0.019 *	0	30	1	1600	0.019 *
Eb Left	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000
Eb Thru	32	1	1600	0.041	1	33	1	1600	0.043	13	46	1	1600	0.063	1	47	1	1600	0.063	0	47	1	1600	0.063
Eb Right	33	0	0	-	1	34	0	0	-	19	53	0	0	-	0	53	0	0	-	0	53	0	0	-
Wb Left	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000	0	1	0	0	0.000
Wb Thru	72	1	1600	0.064 *	3	75	1	1600	0.067 *	18	93	1	1600	0.078 *	1	94	1	1600	0.079 *	0	94	1	1600	0.079 *
Wb Right	30	0	0	-	1	31	0	0	-	0	31	0	0	-	0	31	0	0	-	0	31	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.182					0.186					0.197					0.198					0.198
LOS				A					A					A					A					A

C22

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.001
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU4.WK4

SR-14 NB Ramps @ Avenue G
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	28	1	1600	0.018	1	29	1	1600	0.018	17	46	1	1600	0.029	0	46	1	1600	0.029	0	46	1	1600	0.029
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	60	1	1600	0.038 *	2	62	1	1600	0.039 *	0	62	1	1600	0.039 *	1	63	1	1600	0.040 *	0	63	1	1600	0.040 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Eb Thru	66	1	1600	0.048 *	3	69	1	1600	0.049 *	4	73	1	1600	0.052 *	1	74	1	1600	0.052 *	0	74	1	1600	0.052 *
Eb Right	10	0	0	-	0	10	0	0	-	0	10	0	0	-	0	10	0	0	-	0	10	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	45	1	1600	0.036	2	47	1	1600	0.038	11	58	1	1600	0.045	1	59	1	1600	0.045	0	59	1	1600	0.045
Wb Right	13	0	0	-	0	13	0	0	-	0	13	0	0	-	0	13	0	0	-	0	13	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.186					0.188					0.191					0.192					0.192
LOS				A					A					A					A					A

C23

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.001
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue G
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU4.WK4

SR-14 NB Ramps @ Avenue G
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	32	1	1600	0.020	1	33	1	1600	0.021	11	44	1	1600	0.028	0	44	1	1600	0.028	0	44	1	1600	0.028
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008	0	13	1	1600	0.008
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	42	1	1600	0.029	2	44	1	1600	0.030	13	57	1	1600	0.038	1	58	1	1600	0.039	0	58	1	1600	0.039
Eb Right	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-	0	4	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	68	1	1600	0.069 *	3	71	1	1600	0.072 *	7	78	1	1600	0.076 *	2	80	1	1600	0.078 *	0	80	1	1600	0.078 *
Wb Right	43	0	0	-	2	45	0	0	-	0	45	0	0	-	0	45	0	0	-	0	45	0	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.189					0.193					0.204					0.206					0.206
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.002
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU5.WK4

SR-14 SB Ramps @ Avenue H
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	118	1	1600	0.074	4	122	1	1600	0.077	9	131	1	1600	0.082	0	131	1	1600	0.082	0	131	1	1600	0.082
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	27	1	1600	0.017	1	28	1	1600	0.018	0	28	1	1600	0.018	0	28	1	1600	0.018	0	28	1	1600	0.018
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	137	3	4800	0.034	5	142	3	4800	0.035	9	151	3	4800	0.037	2	153	3	4800	0.038	0	153	3	4800	0.038
Eb Right	26	0	0	-	1	27	0	0	-	0	27	0	0	-	0	27	0	0	-	0	27	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	111	2	3200	0.035 *	4	115	2	3200	0.036 *	28	143	2	3200	0.045 *	1	144	2	3200	0.045 *	0	144	2	3200	0.083 *
Wb Right	104	FREE	999999	0.000	4	108	FREE	999999	0.000	0	108	FREE	999999	0.000	12	120	FREE	999999	0.000	0	120	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.209					0.213					0.227					0.227					0.265
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU5.WK4

SR-14 SB Ramps @ Avenue H
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	203	1	1600	0.127	8	211	1	1600	0.132	30	241	1	1600	0.150	0	241	1	1600	0.150	0	241	1	1600	0.150
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	32	1	1600	0.020	1	33	1	1600	0.021	0	33	1	1600	0.021	0	33	1	1600	0.021	0	33	1	1600	0.021
Eb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000 *
Eb Thru	166	3	4800	0.050 *	6	172	3	4800	0.052 *	32	204	3	4800	0.059 *	1	205	3	4800	0.059 *	0	205	3	4800	0.059
Eb Right	75	0	0	-	3	78	0	0	-	0	78	0	0	-	0	78	0	0	-	0	78	0	0	-
Wb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000
Wb Thru	148	2	3200	0.046	6	154	2	3200	0.048	18	172	2	3200	0.054	2	174	2	3200	0.054	0	174	2	3200	0.099 *
Wb Right	115	FREE	999999	0.000	4	119	FREE	999999	0.000	0	119	FREE	999999	0.000	23	142	FREE	999999	0.000	0	142	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.277					0.284					0.309					0.309					0.349
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

SR-14 NB Ramps @ Avenue H

N-S St: SR-14 NB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU6.WK4

Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	30	2	2880	0.010	1	31	2	2880	0.011	0	31	2	2880	0.011	0	31	2	2880	0.011	0	31	2	2880	0.011
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	68	1	1600	0.043 *	3	71	1	1600	0.044 *	0	71	1	1600	0.044 *	30	101	1	1600	0.063 *	0	101	1	1600	0.063 *
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Eb Thru	241	3	4800	0.054	9	250	3	4800	0.056	19	269	3	4800	0.060	2	271	3	4800	0.060	0	271	3	4800	0.060
Eb Right	16	0	0	-	1	17	0	0	-	0	17	0	0	-	0	17	0	0	-	0	17	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	193	2	3200	0.060 *	7	200	2	3200	0.063 *	28	228	2	3200	0.071 *	13	241	2	3200	0.075 *	0	241	2	3200	0.075 *
Wb Right	65	1	1600	0.041	2	67	1	1600	0.042	27	94	1	1600	0.059	0	94	1	1600	0.059	0	94	1	1600	0.059
Yellow Allowance:				**0.100 ***					**0.100 ***					**0.100 ***					**0.100 ***					**0.100 ***
ICU				**0.203**					**0.207**					**0.215**					**0.238**					**0.238**
LOS				**A**					**A**					**A**					**A**					**A**

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.023
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue H
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU6.WK4

SR-14 NB Ramps @ Avenue H
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	52	2	2880	0.018	2	54	2	2880	0.019	0	54	2	2880	0.019	0	54	2	2880	0.019	0	54	2	2880	0.019
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	134	1	1600	0.084 *	5	139	1	1600	0.087 *	0	139	1	1600	0.087 *	12	151	1	1600	0.094 *	0	151	1	1600	0.094 *
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0	0.000
Eb Thru	280	3	4800	0.063	11	291	3	4800	0.066	63	354	3	4800	0.079	1	355	3	4800	0.079	0	355	3	4800	0.079
Eb Right	23	0	0	-	1	24	0	0	-	0	24	0	0	-	0	24	0	0	-	0	24	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	227	2	3200	0.071	9	236	2	3200	0.074	18	254	2	3200	0.079	25	279	2	3200	0.087	0	279	2	3200	0.087
Wb Right	116	1	1600	0.073 *	4	120	1	1600	0.075 *	18	138	1	1600	0.087 *	0	138	1	1600	0.087	0	138	1	1600	0.087
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.257					0.262					0.274					0.281					0.281
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.007
Significant Impact: NO

Area Traffic Mitigation:

C29

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU7.WK4

SR-14 SB Ramps @ Avenue I
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	23	1	1600	0.014	1	24	1	1600	0.015	2	26	1	1600	0.016	0	26	1	1600	0.016	0	26	1	1600	0.016
Sb Thru	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008	0	12	1	1600	0.008
Sb Right	27	1	1600	0.017 *	1	28	1	1600	0.018 *	0	28	1	1600	0.018 *	0	28	1	1600	0.018 *	0	28	1	1600	0.018 *
Eb Left	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001
Eb Thru	311	2	3200	0.097 *	12	323	2	3200	0.101 *	11	334	2	3200	0.104 *	0	334	2	3200	0.104 *	0	334	2	3200	0.104 *
Eb Right	72	1	1600	0.045	3	75	1	1600	0.047	0	75	1	1600	0.047	0	75	1	1600	0.047	0	75	1	1600	0.047
Wb Left	341	1	1600	0.213 *	13	354	1	1600	0.221 *	155	509	1	1600	0.318 *	0	509	1	1600	0.318 *	0	509	1	1600	0.318 *
Wb Thru	557	2	3200	0.174	21	578	2	3200	0.181	32	610	2	3200	0.191	0	610	2	3200	0.191	0	610	2	3200	0.191
Wb Right	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001	0	2	1	1600	0.001
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.426					0.439					0.539					0.539					0.539
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C29

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 SB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU7.WK4

SR-14 SB Ramps @ Avenue I
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Nb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Sb Left	31	1	1600	0.019	1	32	1	1600	0.020	8	40	1	1600	0.025	0	40	1	1600	0.025	0	40	1	1600	0.025
Sb Thru	37	1	1600	0.023 *	1	38	1	1600	0.024 *	0	38	1	1600	0.024	0	38	1	1600	0.024	0	38	1	1600	0.024
Sb Right	22	1	1600	0.014	1	23	1	1600	0.014	0	23	1	1600	0.014	0	23	1	1600	0.014	0	23	1	1600	0.014
Eb Left	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003	0	5	1	1600	0.003
Eb Thru	729	2	3200	0.228 *	28	757	2	3200	0.236 *	35	792	2	3200	0.247 *	0	792	2	3200	0.247 *	0	792	2	3200	0.247 *
Eb Right	185	1	1600	0.116	7	192	1	1600	0.120	0	192	1	1600	0.120	0	192	1	1600	0.120	0	192	1	1600	0.120
Wb Left	241	1	1600	0.151 *	9	250	1	1600	0.156 *	103	353	1	1600	0.221 *	0	353	1	1600	0.221 *	0	353	1	1600	0.221 *
Wb Thru	707	2	3200	0.221	27	734	2	3200	0.229	20	754	2	3200	0.236	0	754	2	3200	0.236	0	754	2	3200	0.236
Wb Right	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005	0	8	1	1600	0.005
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.502					0.516					0.593					0.593					0.593
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU8.WK4

SR-14 NB Ramps @ Avenue I
Peak hr: AM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	219	1	1600	0.137	8	227	1	1600	0.142	0	227	1	1600	0.142	0	227	1	1600	0.142	0	227	1	1600	0.142
Nb Thru	2	1	1600	0.104	0	2	1	1600	0.108	0	2	1	1600	0.140	0	2	1	1600	0.140	0	2	1	1600	0.140
Nb Right	164	0	0	-	6	170	0	0	-	52	222	0	0	-	0	222	0	0	-	0	222	0	0	-
Sb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	52	1	1600	0.033 *	2	54	1	1600	0.034 *	0	54	1	1600	0.034 *	0	54	1	1600	0.034 *	0	54	1	1600	0.034 *
Eb Thru	341	2	3200	0.107	13	354	2	3200	0.111	13	367	2	3200	0.115	0	367	2	3200	0.115	0	367	2	3200	0.115
Eb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	702	2	3200	0.219 *	27	729	2	3200	0.228 *	187	916	2	3200	0.286 *	0	916	2	3200	0.286 *	0	916	2	3200	0.311 *
Wb Right	69	FREE	999999	0.000	3	72	FREE	999999	0.000	7	79	FREE	999999	0.000	0	79	FREE	999999	0.000	0	79	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.489					0.504					0.562					0.562					0.587
LOS				A					A					A					A					A

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C31

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: SR-14 NB Ramps
E-W St: Avenue I
Project: Lancaster Landfill, County of Los Angeles-- Without Avenue F Extension
File: N:\2600\2052684\ICU\WOAF\ICU8.WK4

SR-14 NB Ramps @ Avenue I
Peak hr: PM
Annual Growth: 3.80%

Date: 10/27/2005
Date of Count: 2005
Projection Year: 2006

	2005 EXISTING TRAFFIC				2006 WITH AMBIENT GROWTH					2006 WITH CUMULATIVE PROJECTS					2006 WITH PROJECT TRAFFIC					2006 WITH MITIGATION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	255	1	1600	0.159	10	265	1	1600	0.165	0	265	1	1600	0.165	0	265	1	1600	0.165	0	265	1	1600	0.165
Nb Thru	2	1	1600	0.283 *	0	2	1	1600	0.293 *	0	2	1	1600	0.403 *	0	2	1	1600	0.403 *	0	2	1	1600	0.403 *
Nb Right	450	0	0	-	17	467	0	0	-	176	643	0	0	-	0	643	0	0	-	0	643	0	0	-
Sb Left	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0	0.000 *
Sb Thru	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Sb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Eb Left	144	1	1600	0.090 *	5	149	1	1600	0.093 *	0	149	1	1600	0.093 *	0	149	1	1600	0.093 *	0	149	1	1600	0.093 *
Eb Thru	608	2	3200	0.190	23	631	2	3200	0.197	43	674	2	3200	0.211	0	674	2	3200	0.211	0	674	2	3200	0.211
Eb Right	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Wb Left	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000	0	0	0	0	0.000
Wb Thru	792	2	3200	0.248 *	30	822	2	3200	0.257 *	124	946	2	3200	0.296 *	0	946	2	3200	0.296 *	0	946	2	3200	0.338 *
Wb Right	128	FREE	999999	0.000	5	133	FREE	999999	0.000	4	137	FREE	999999	0.000	0	137	FREE	999999	0.000	0	137	FREE	0	-
Yellow Allowance:				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.721					0.743					0.892					0.892					0.934
LOS				C					C					D					D					E

* Key conflicting movement as a part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Bowen-Souter Southland Car Counters
Capacity expressed in vehicles per hour of green.

Project ICU Impact: 0.000
Significant Impact: NO

Area Traffic Mitigation:

C32

APPENDIX D

TRAFFIC SIGNAL WARRANTS WORKSHEETS

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

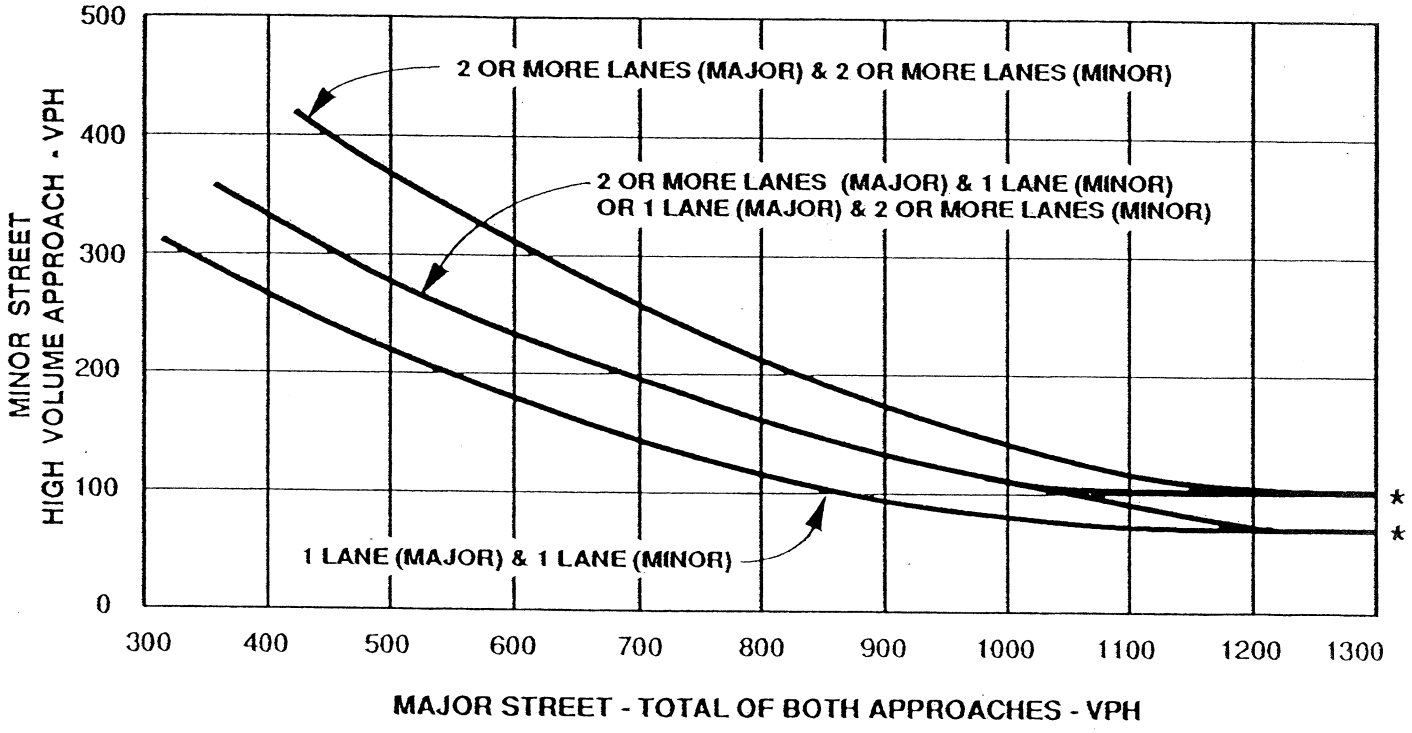
Intersection: #1

Major Street: Avenue F

Minor Street: SR-14 SB Ramp

Scenario: year 2005 Existing AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM=(112, 4)
PM= (203, 7)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

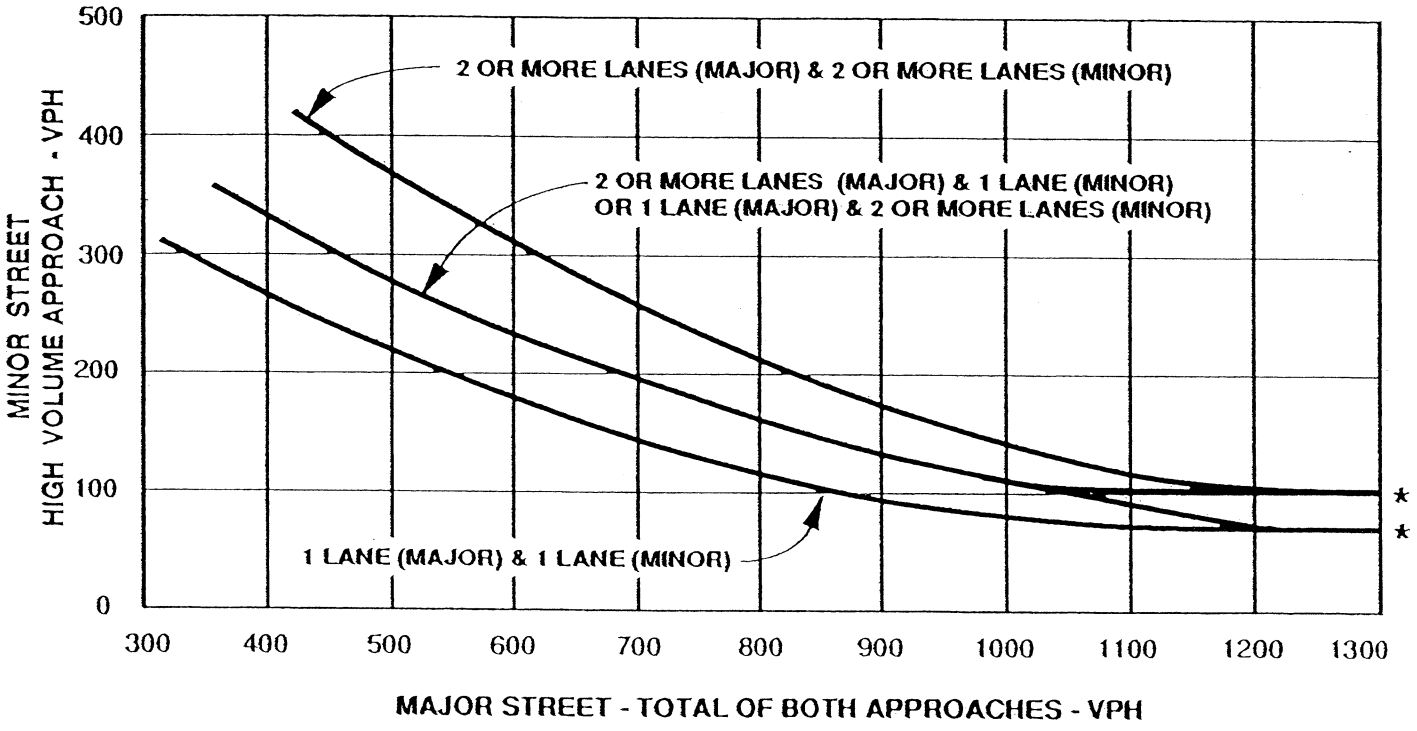
Intersection: #1

Major Street: Avenue F

Minor Street: SR-14 SB Ramps

Scenario: year 2006 Cumulative Base AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM = (216, 4)
PM = (210, 7)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

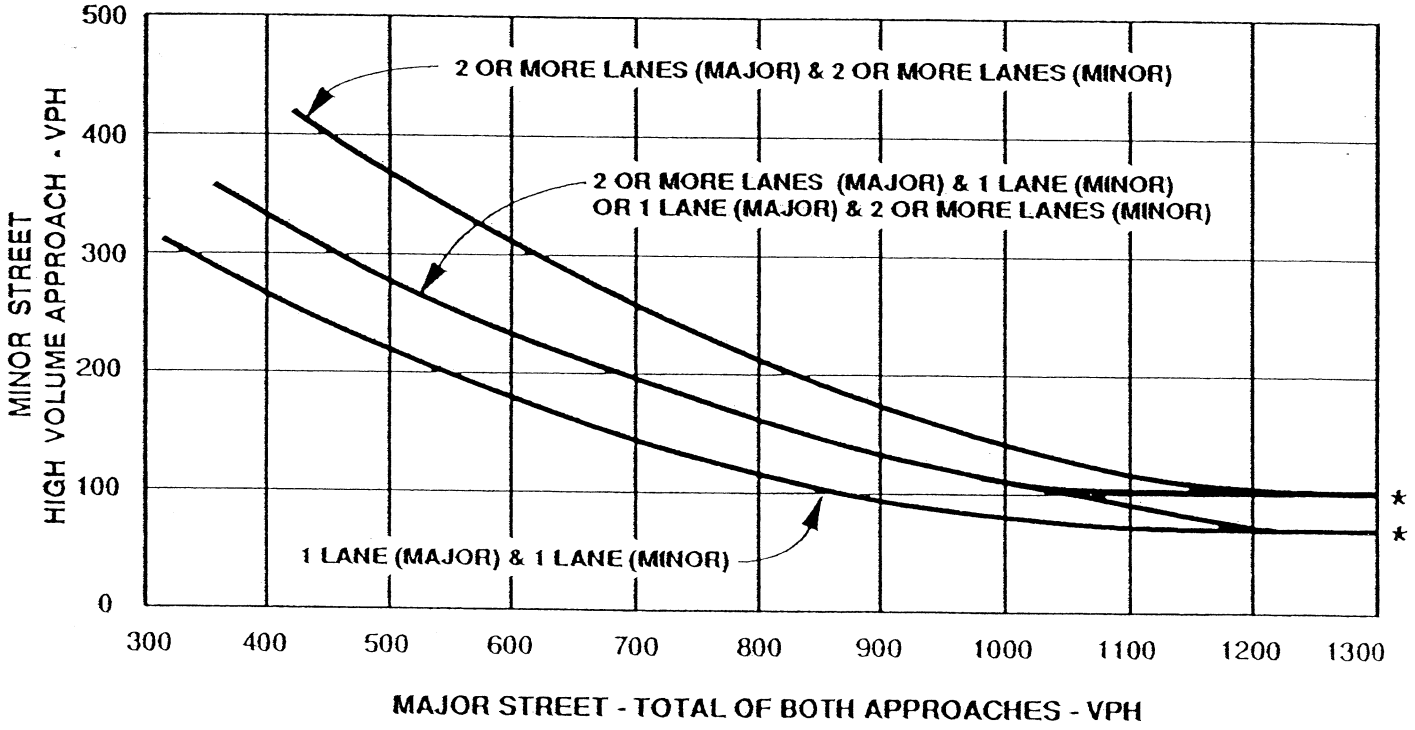
Intersection: #1

Major Street: Avenue F

Minor Street: SR-14 SB Ramp

Scenario: Year 2006 Cumulative + Project (with Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM> (124, 4)
PM< (227, 7)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection: #1

Major Street: Avenue F

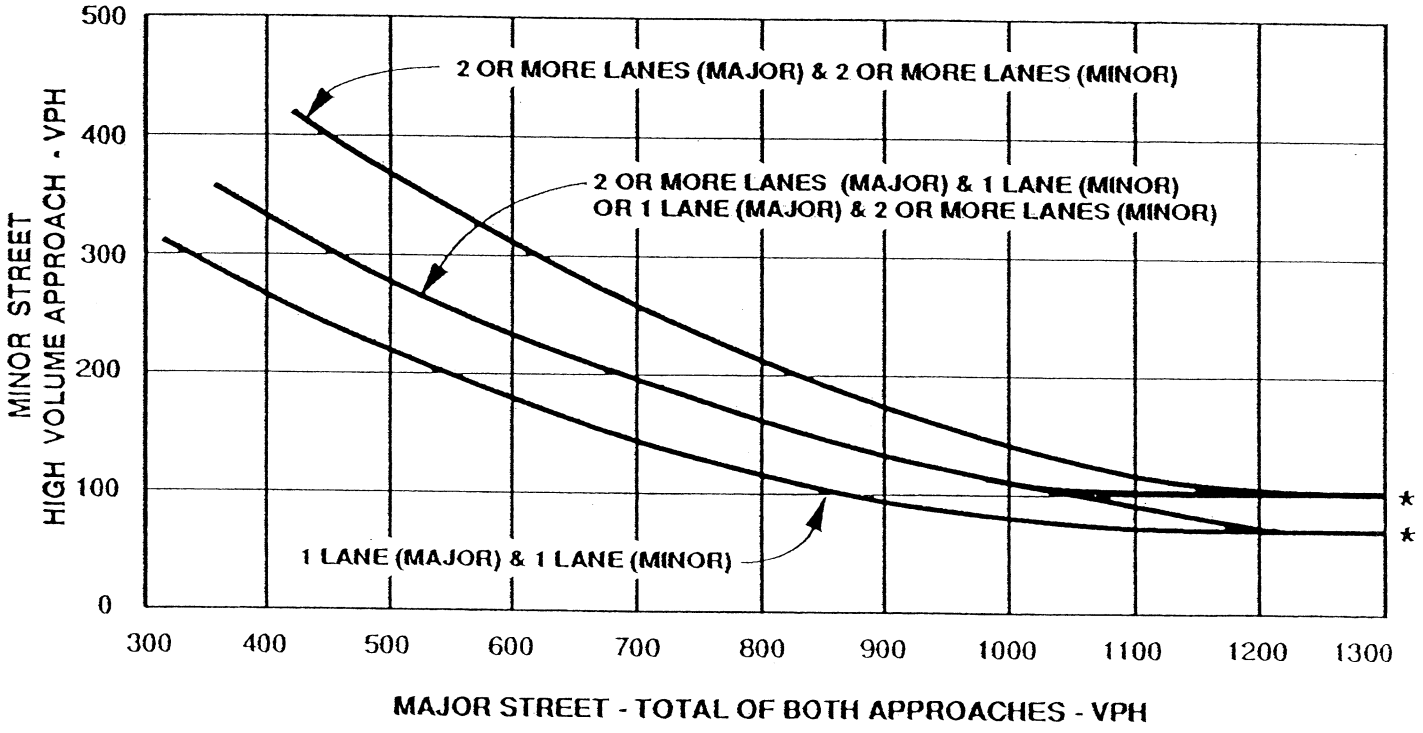
Minor Street: SR-14 SB Ramp

Scenario: Year 2006 Cumulative Project (without Ave F) AM/PM Peak hour

# of lanes in each approach

Major: 1

Minor: 2



AM = (116, 4)

PM = (210, 7)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

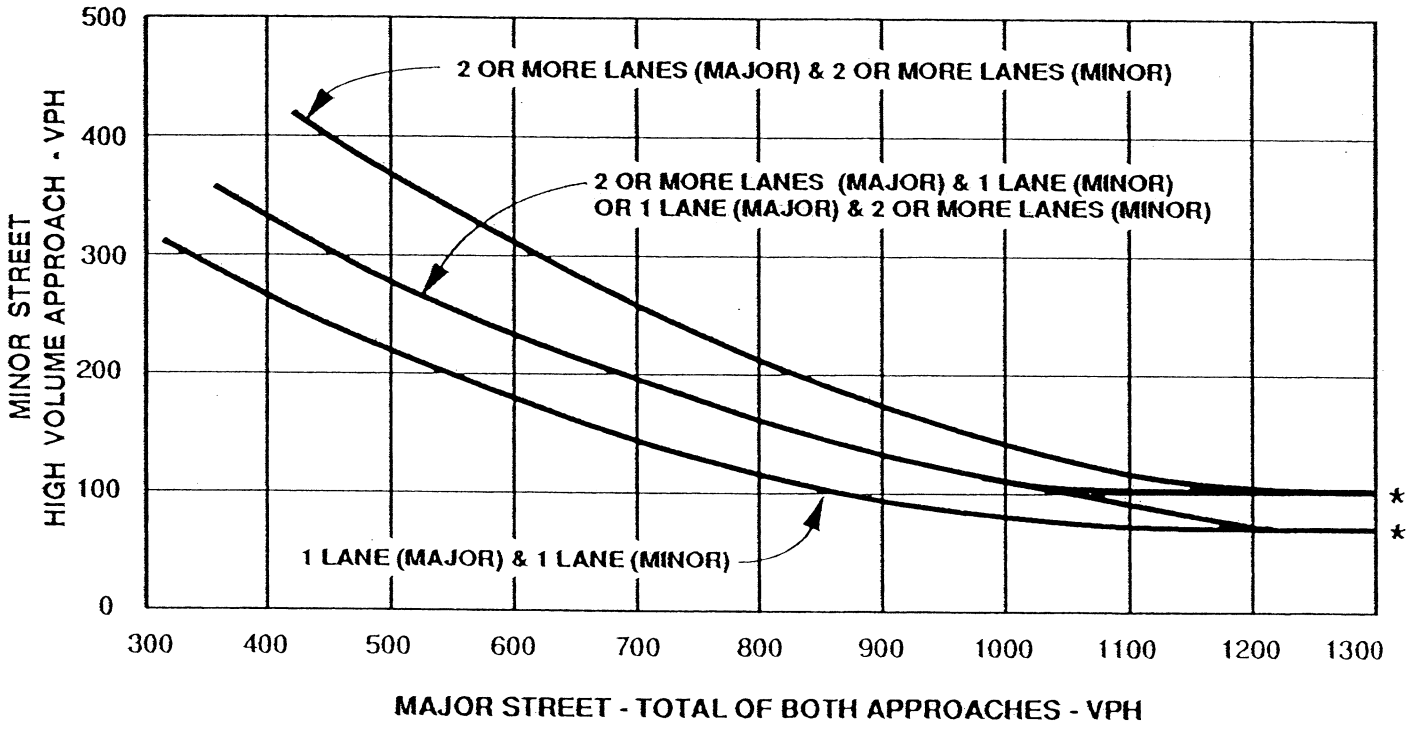
Intersection: #2

Major Street: Avenue F

Minor Street: SR-14 NB Ramps

Scenario: Year 2005 Existing AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM=(45, 47)
PM= (111, 82)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

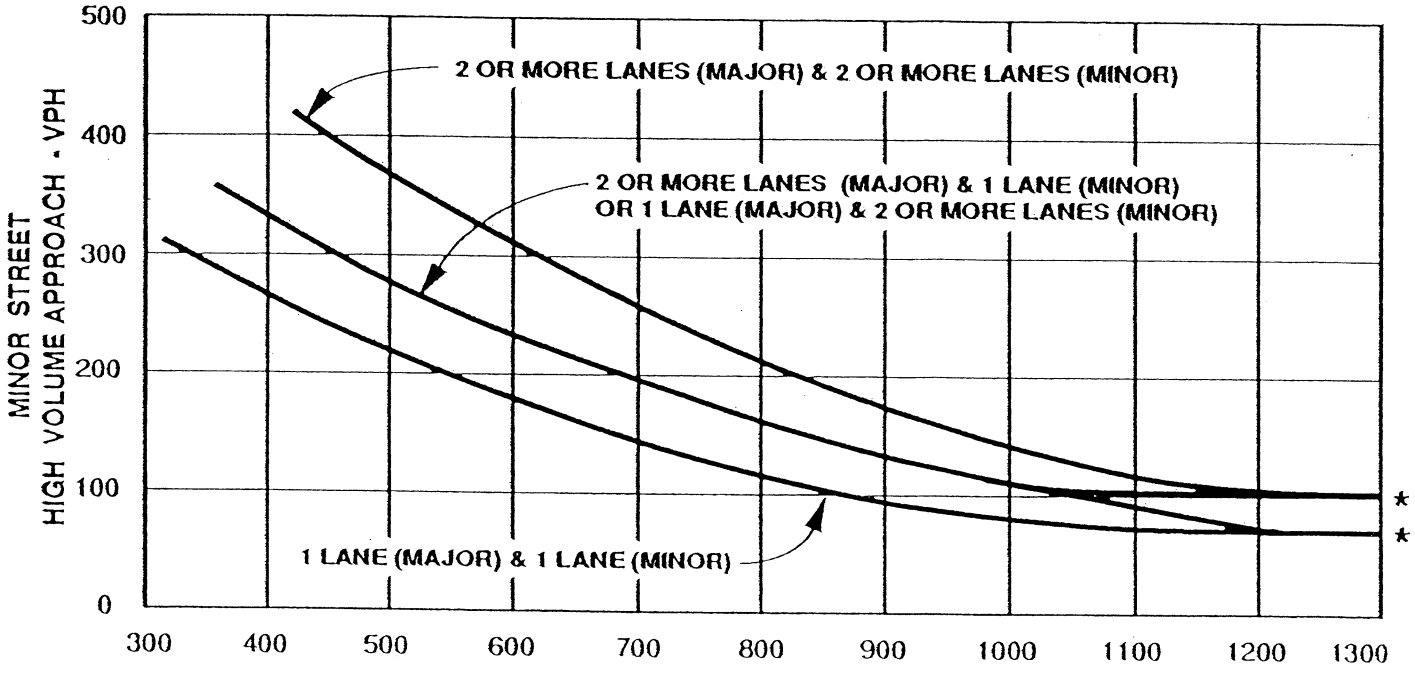
Intersection: #2

Major Street: Avenue F

Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative Base AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM= (47, 49)
PM= (115, 85)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

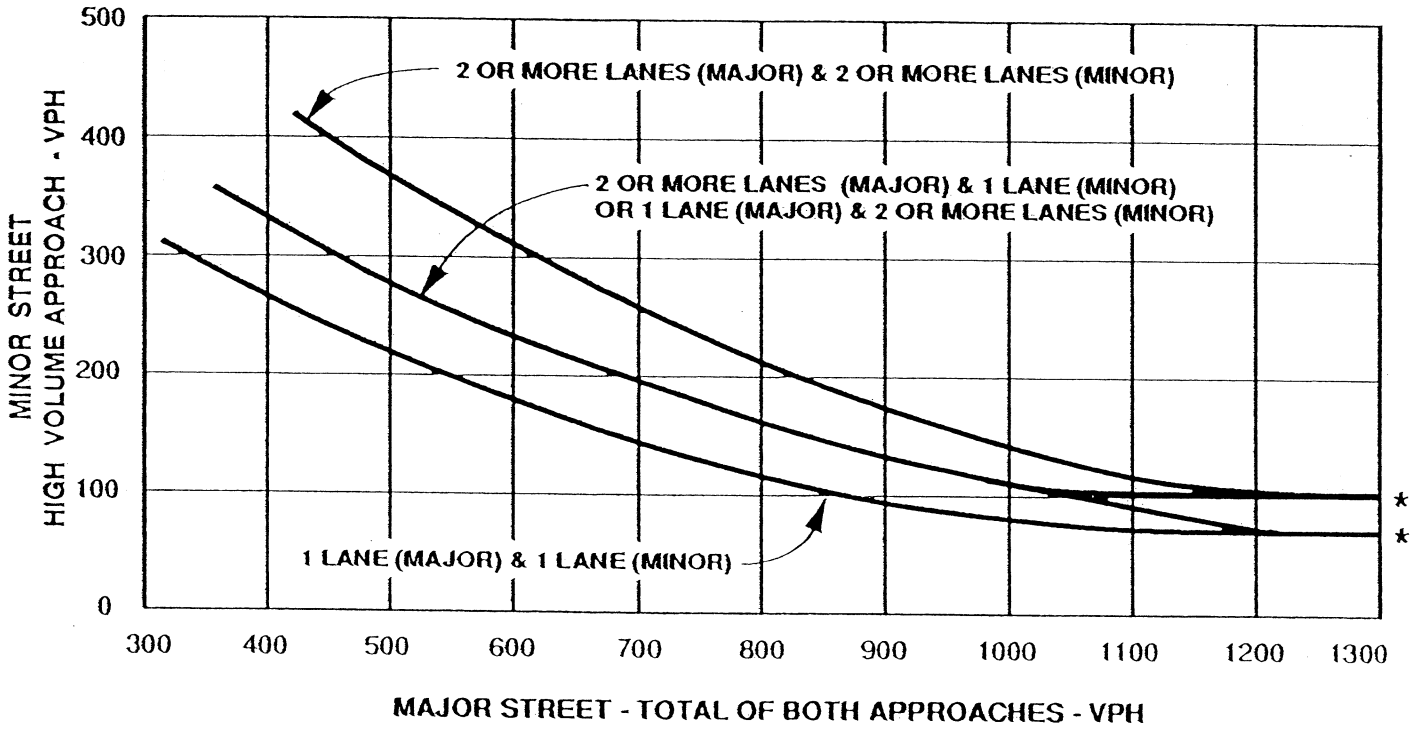
Intersection: #2

Major Street: Avenue F

Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative + Project (with Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM= (55, 72)

PM= (132, 94)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

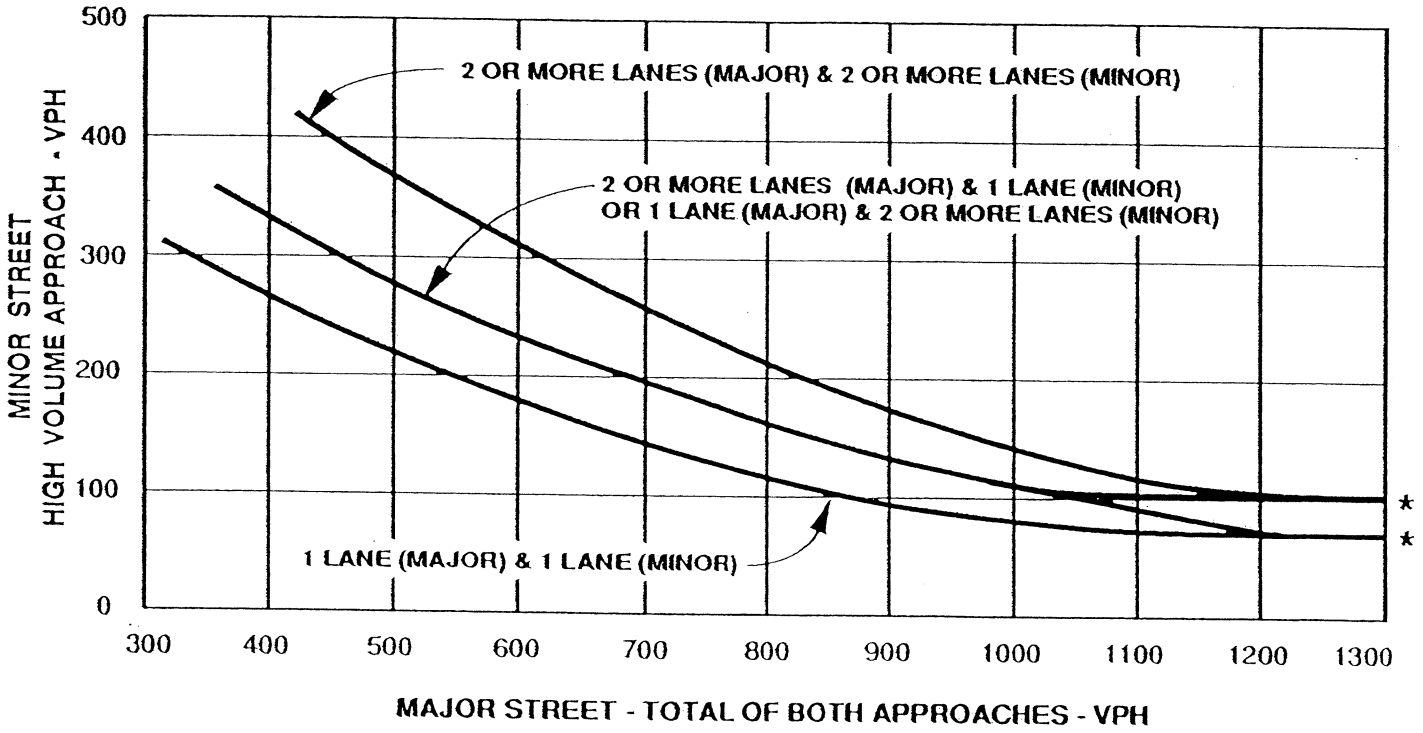
Intersection: #2

Major Street: Avenue F

Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative + Project (without Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM= (47, 49)
PM= (115, 85)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

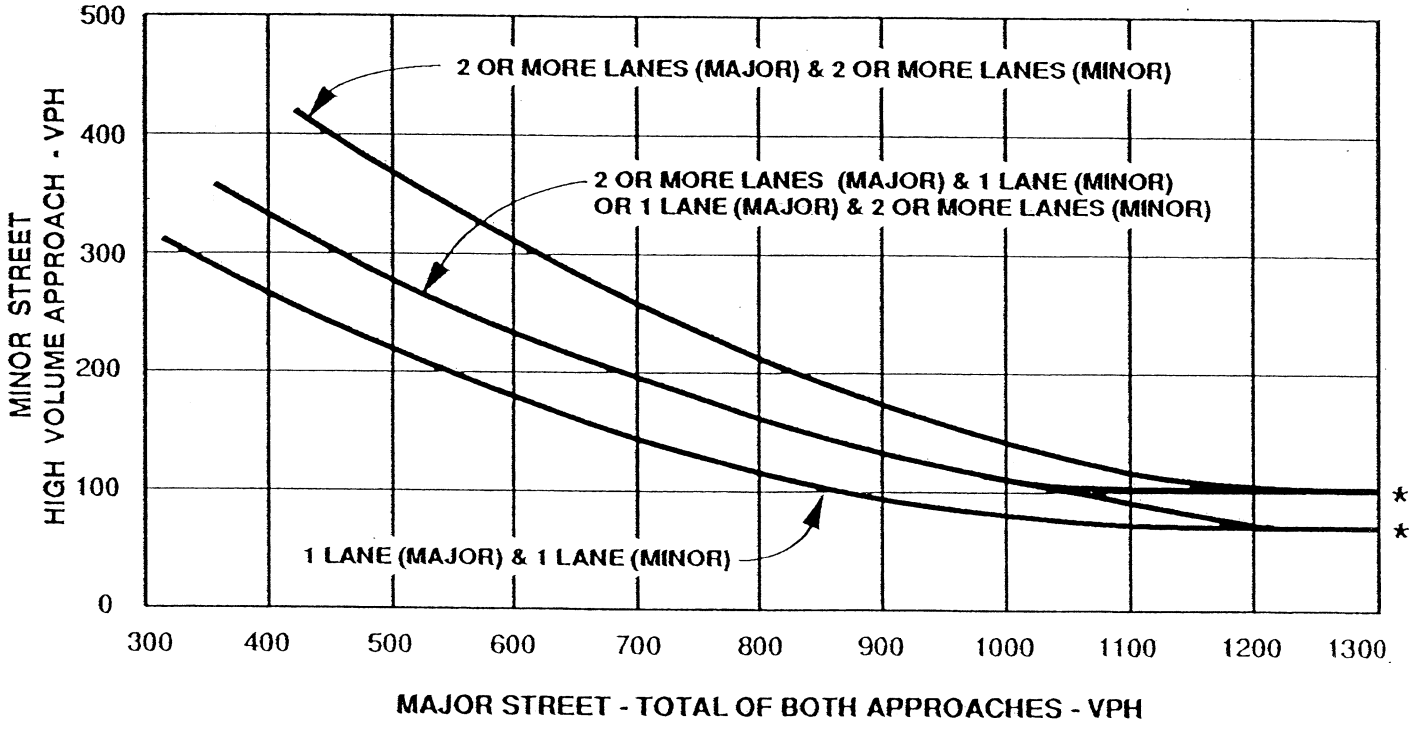
Intersection: # 3

Major Street: Avenue G

Minor Street: SR-14 SB Ramps

Scenario: Year 2005 Existing AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM= (152, 37)
PM= (169, 42)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection: #3

Major Street: Avenue G

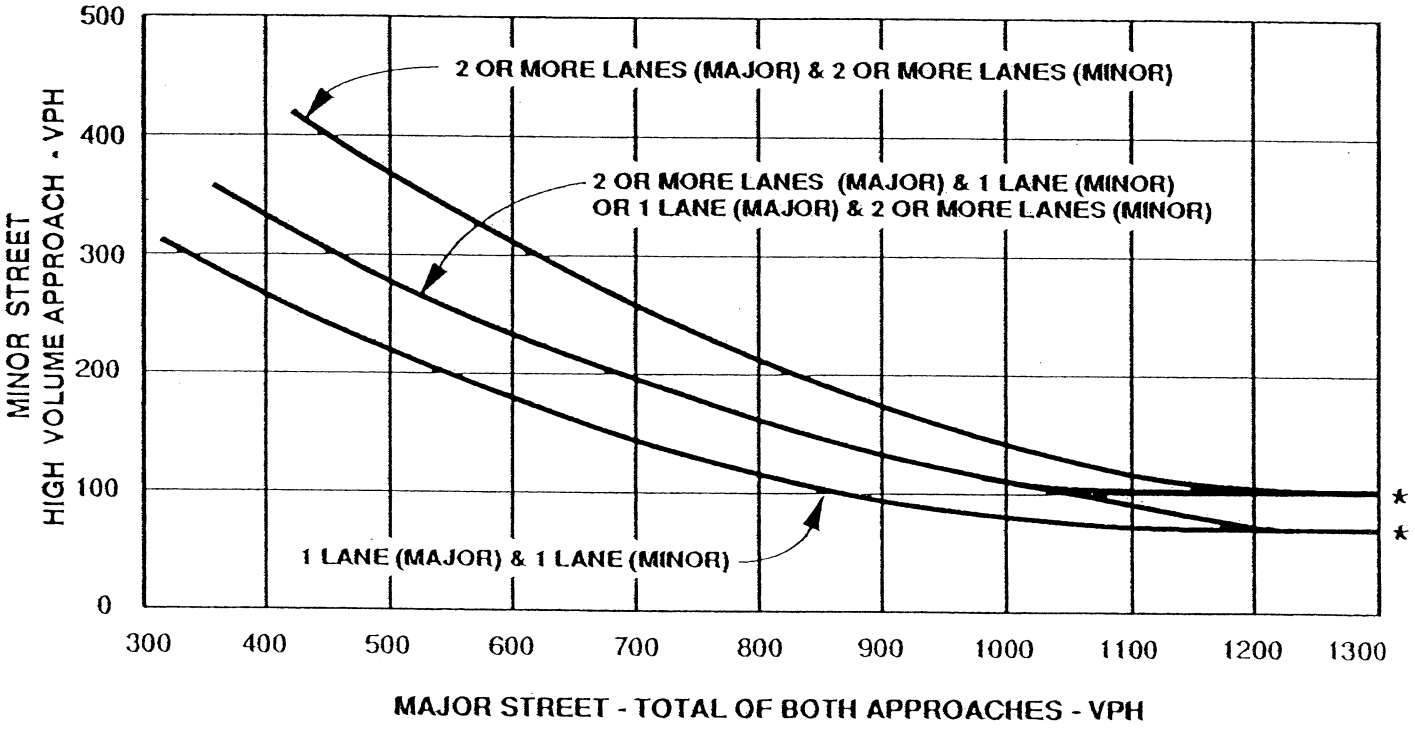
Minor Street: SR-14 SB Ramps

Scenario: Year 2006 Cumulative Base AM/PM Peak Hour

# of lanes in each approach

Major: 1

Minor: 2



AM= (195, 38)

PM= (225, 43)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

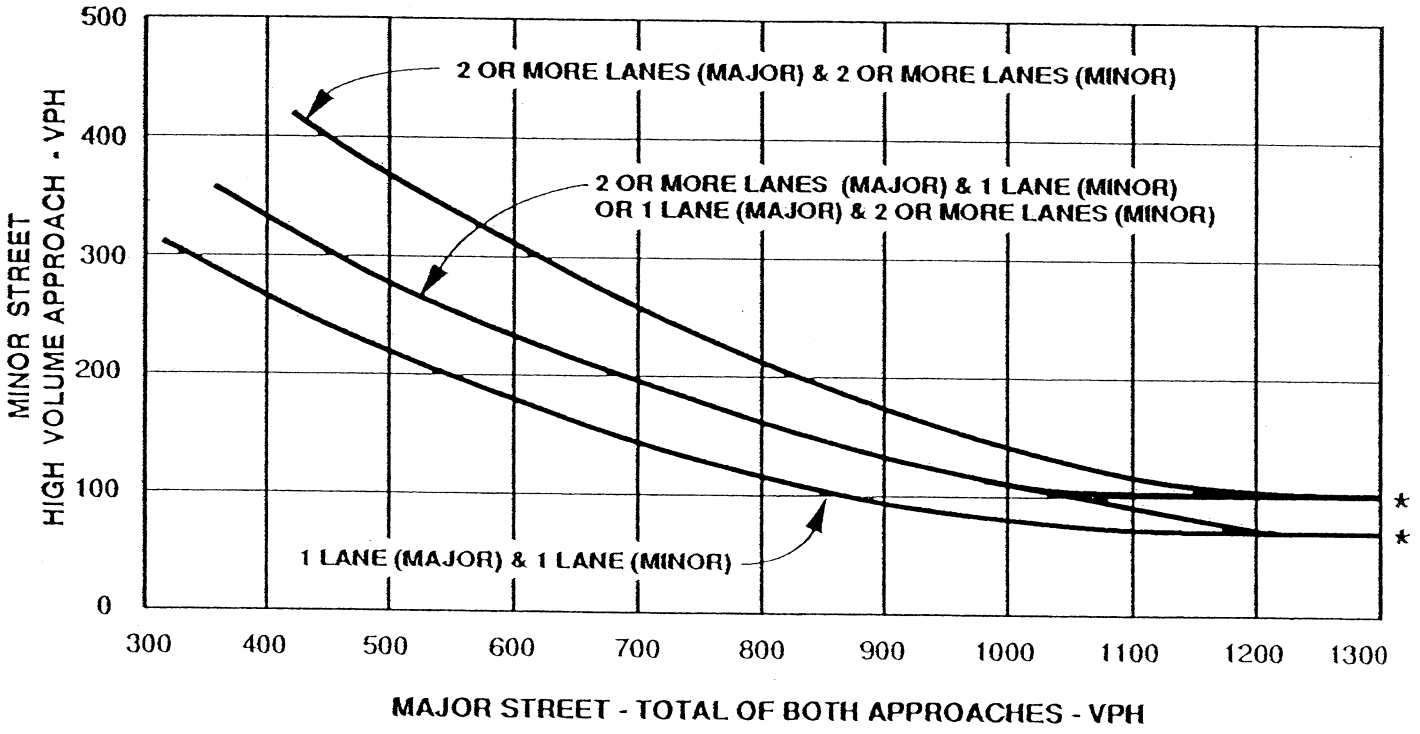
Intersection: #3

Major Street: Avenue G

Minor Street: SR-14 SB Ramps

Scenario: Year 2006 Cumulative + Project (with Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM= (197, 38)
PM= (227, 43)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

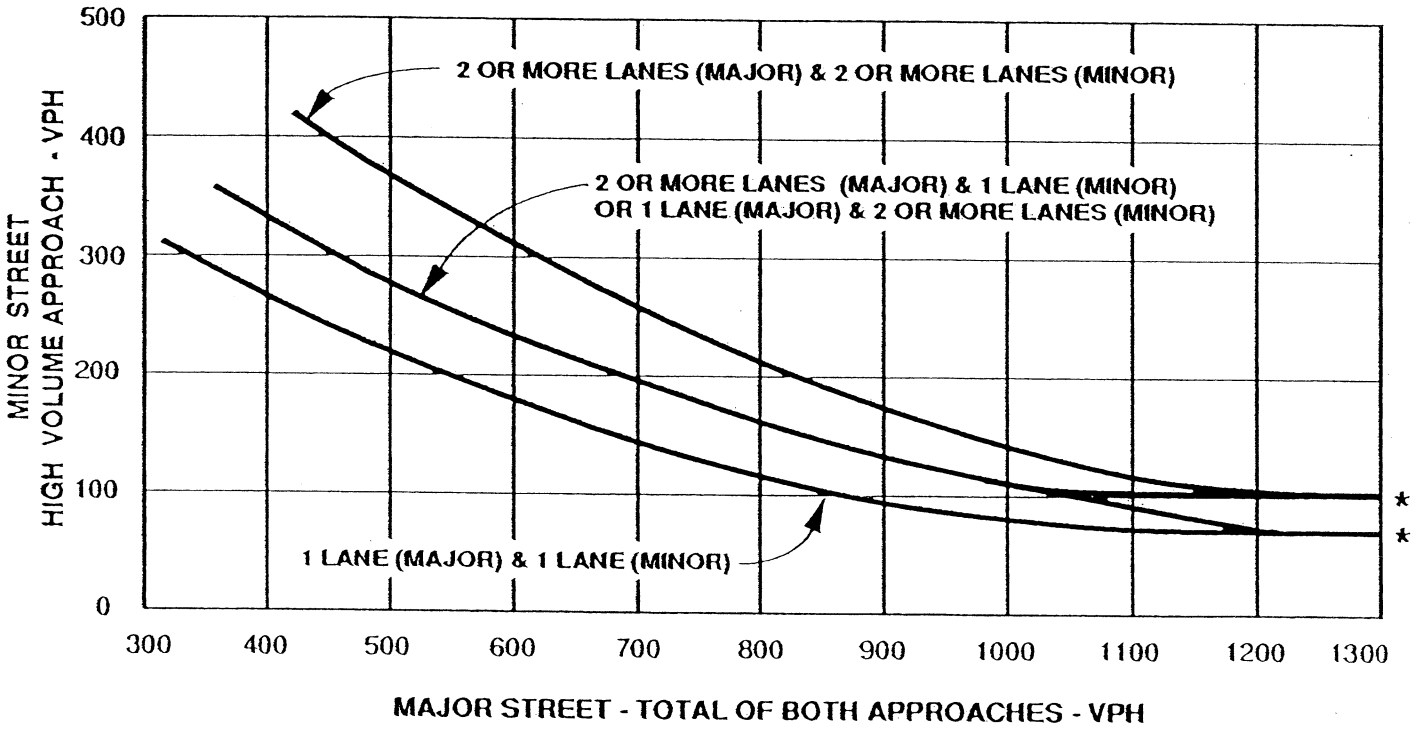
Intersection: #3

Major Street: Avenue G

Minor Street: SR-14 SB Ramps

Scenario: Year 2006 Cumulative + Project (without Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM = (197, 38)

PM = (227, 43)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

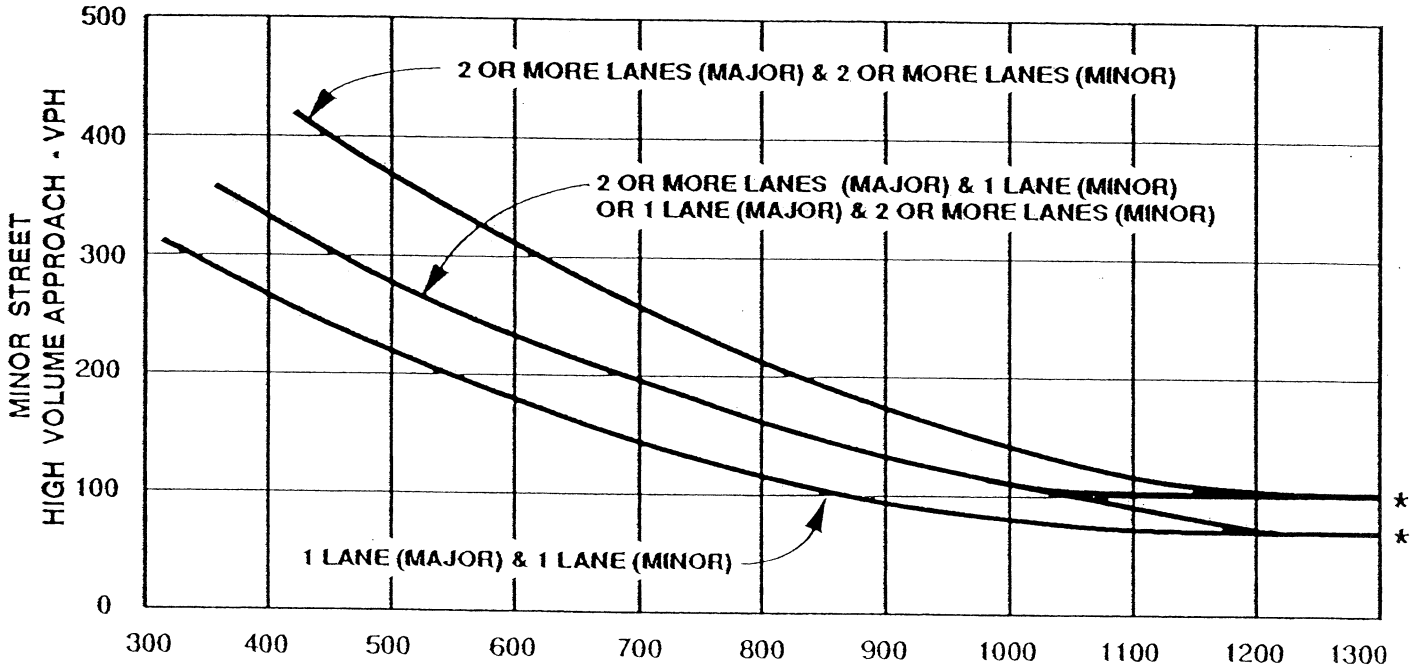
Intersection: #4

Major Street: Avenue G

Minor Street: SR-14 NB Ramps

Scenario: Year 2005 Existing AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM = (134, 88)
PM = (157, 45)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection: #4

Major Street: Avenue G

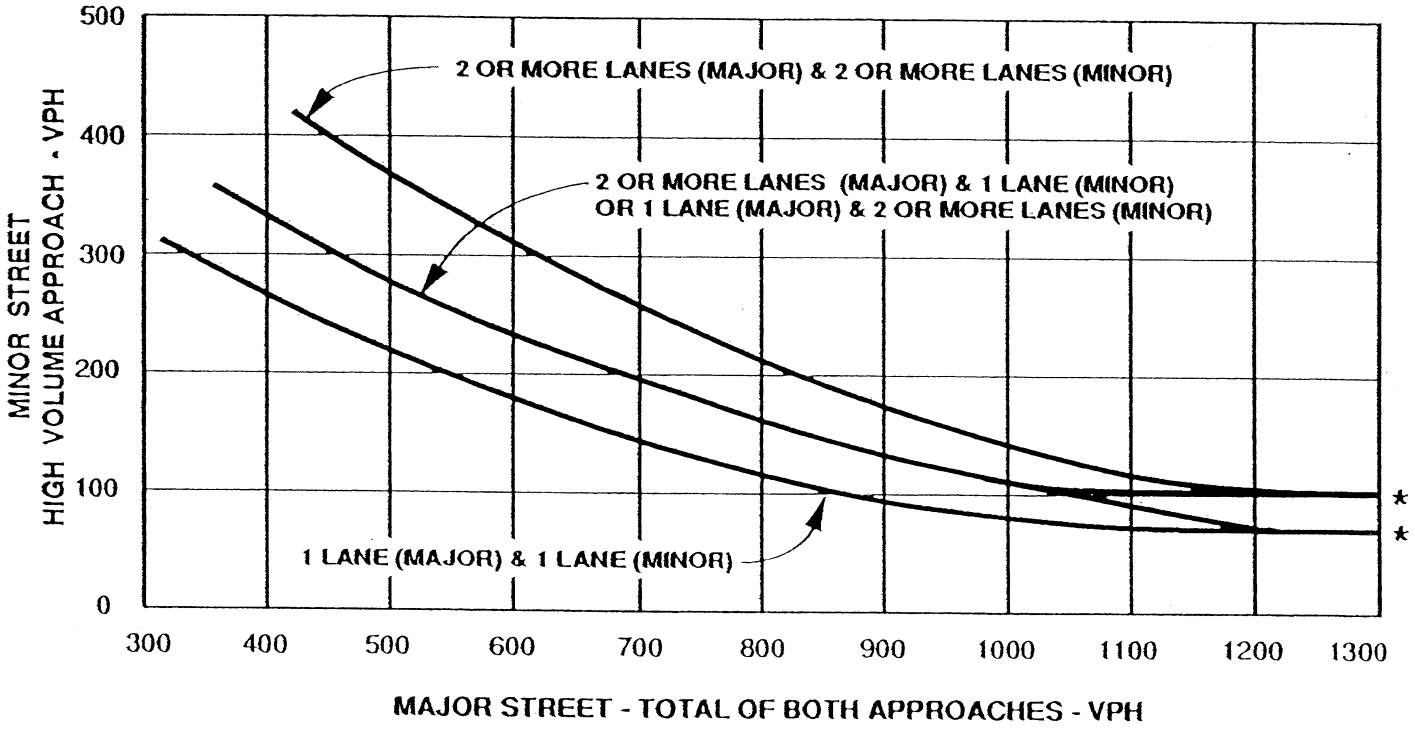
Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative Base AM/PM Peak Hour

# of lanes in each approach

Major: 1

Minor: 2



AM = (154, 108)

PM = (184, 57)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

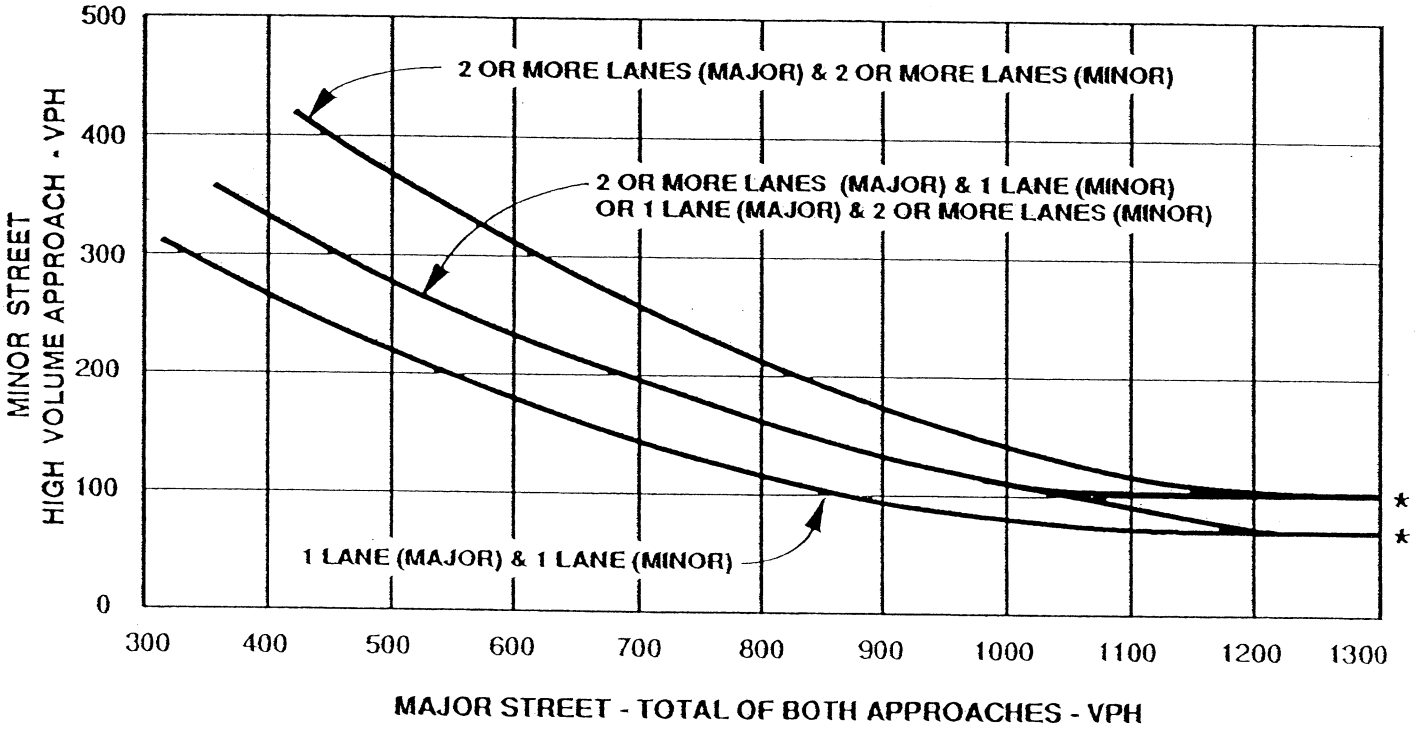
Intersection: #4

Major Street: Avenue G

Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative + Project (with Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 1
Minor: 2



AM = (156, 108)
PM = (186, 57)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection: #4

Major Street: Avenue 6

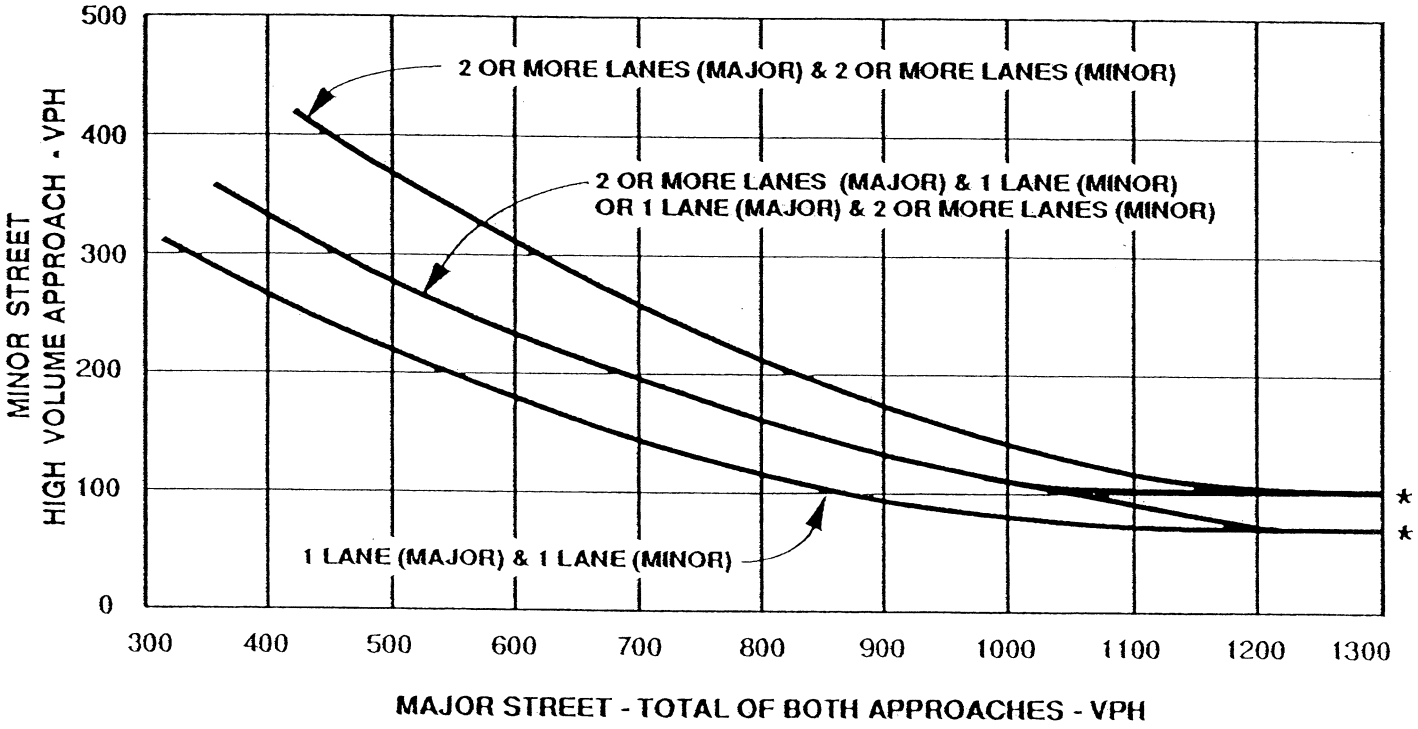
Minor Street: SR-14 NB Ramps

Scenario: Year 2006 Cumulative + Proj (without Ave F) AM/PM Peak Hour

# of lanes in each approach

Major: 1

Minor: 2



AM= (155, 110)

PM= (187, 57)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

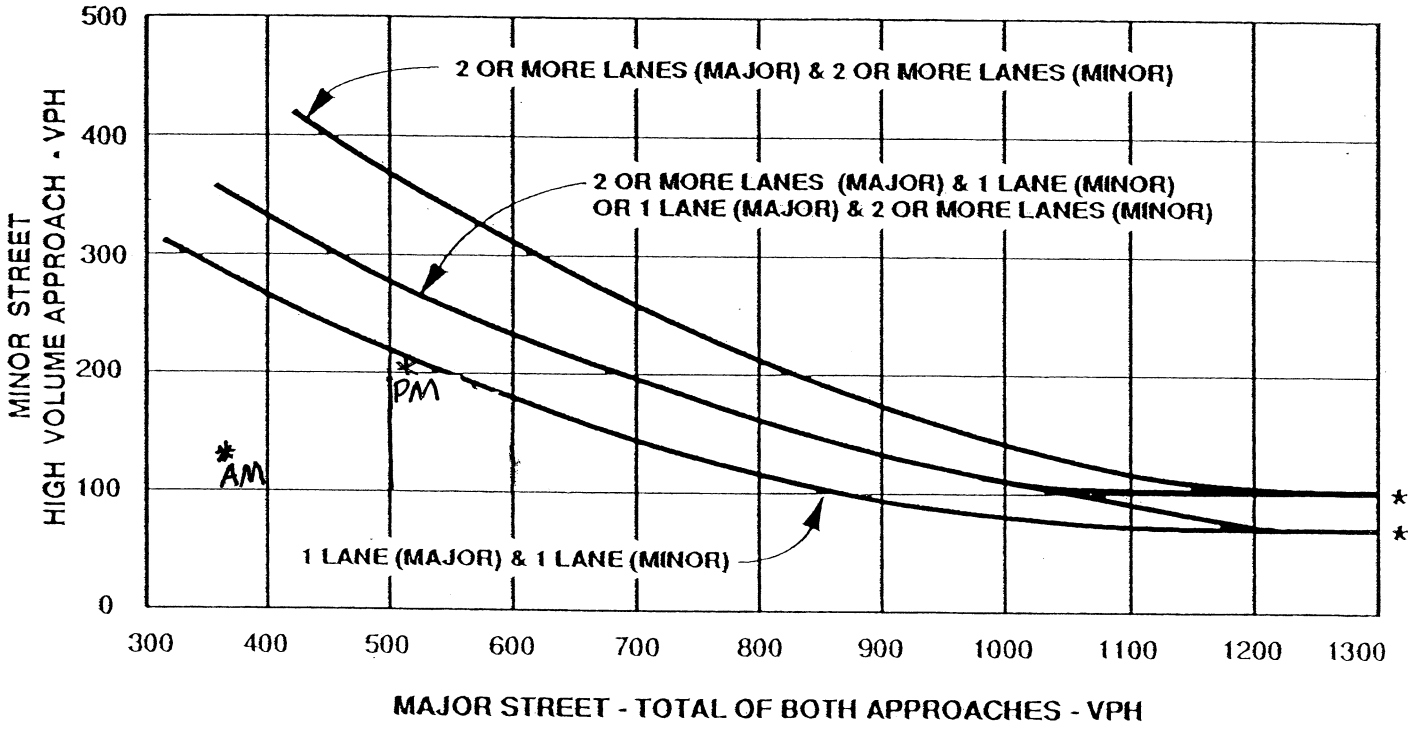
Intersection: #5

Major Street: Avenue H

Minor Street: SR-14 SB Ramp

Scenario: Year 2005 EXISTING AM/PM Peak Hour

# of lanes in each approach
Major: 3
Minor: 2



AM = (378, 145)

PM = (504, 235)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

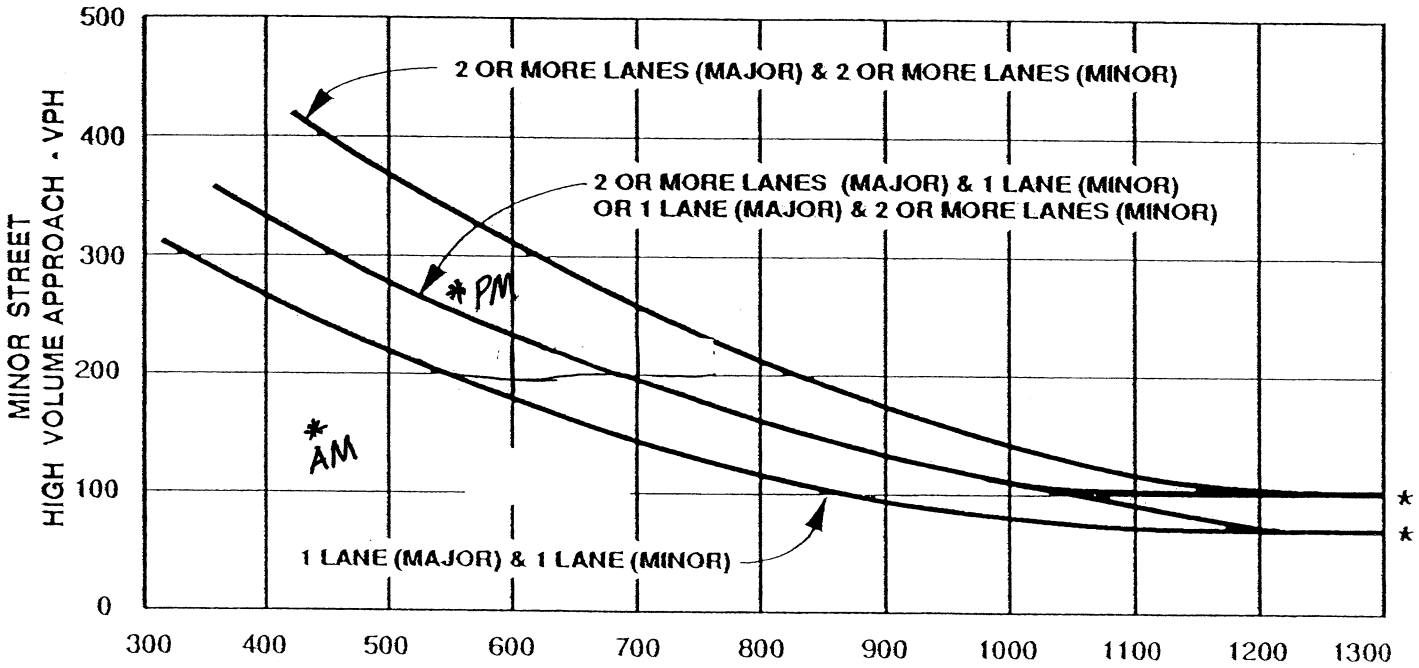
Intersection: #5

Major Street: Avenue H

Minor Street: SR-14 SB Ramp

Scenario: Year 2006 Cumulative Base AM/PM peak hour

# of lanes in each approach
Major: 3
Minor: 2



AM = (429, 159)
PM = (573, 274)

* 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.

Warrant Satisfied? No

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

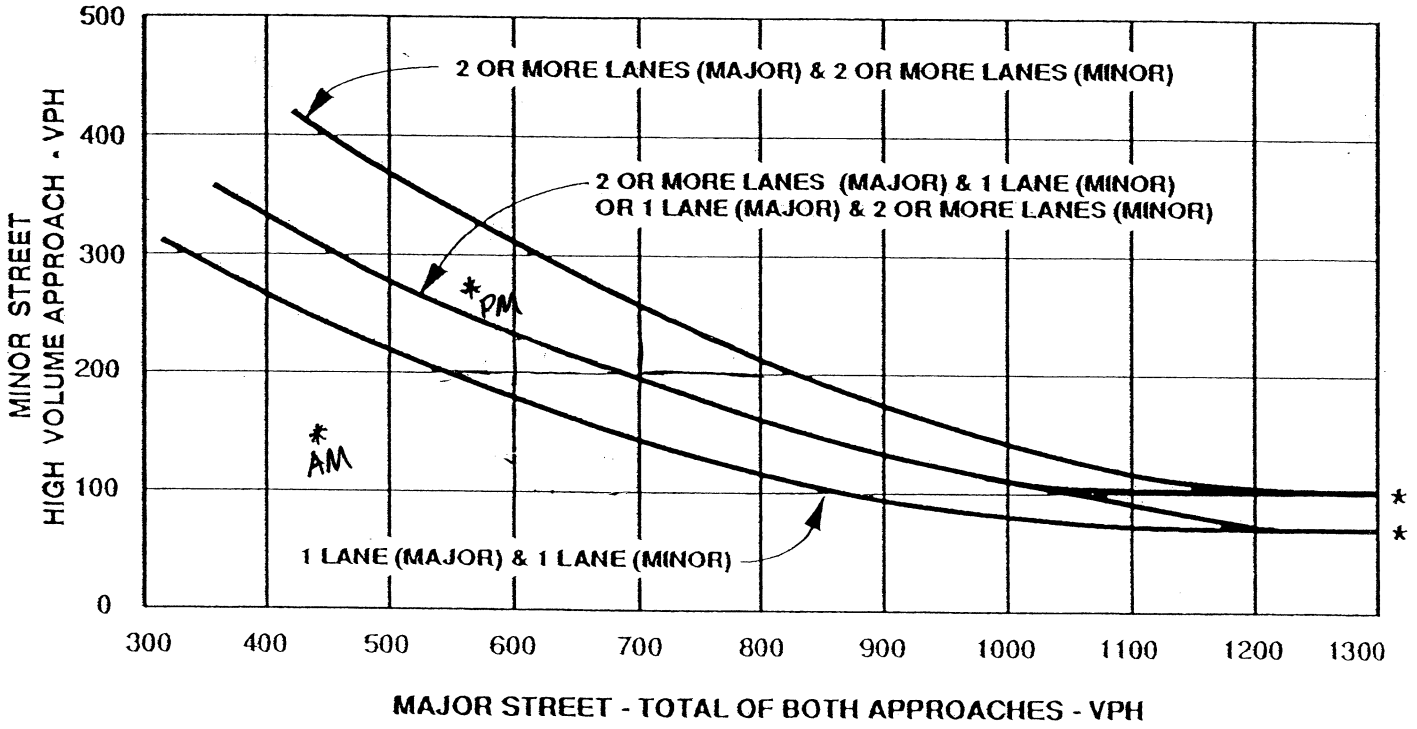
Intersection: #5

Major Street: Avenue H

Minor Street: SR-14 SB Ramp

Scenario: Year 2006 Cumulative + Project (with Ave F) AM/PM Peak Hour

# of lanes in each approach
Major: 3
Minor: 2



AM = (436, 159)
PM = (582, 274)

* 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.

Warrant Satisfied? NO

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection: #5

Major Street: Avenue H

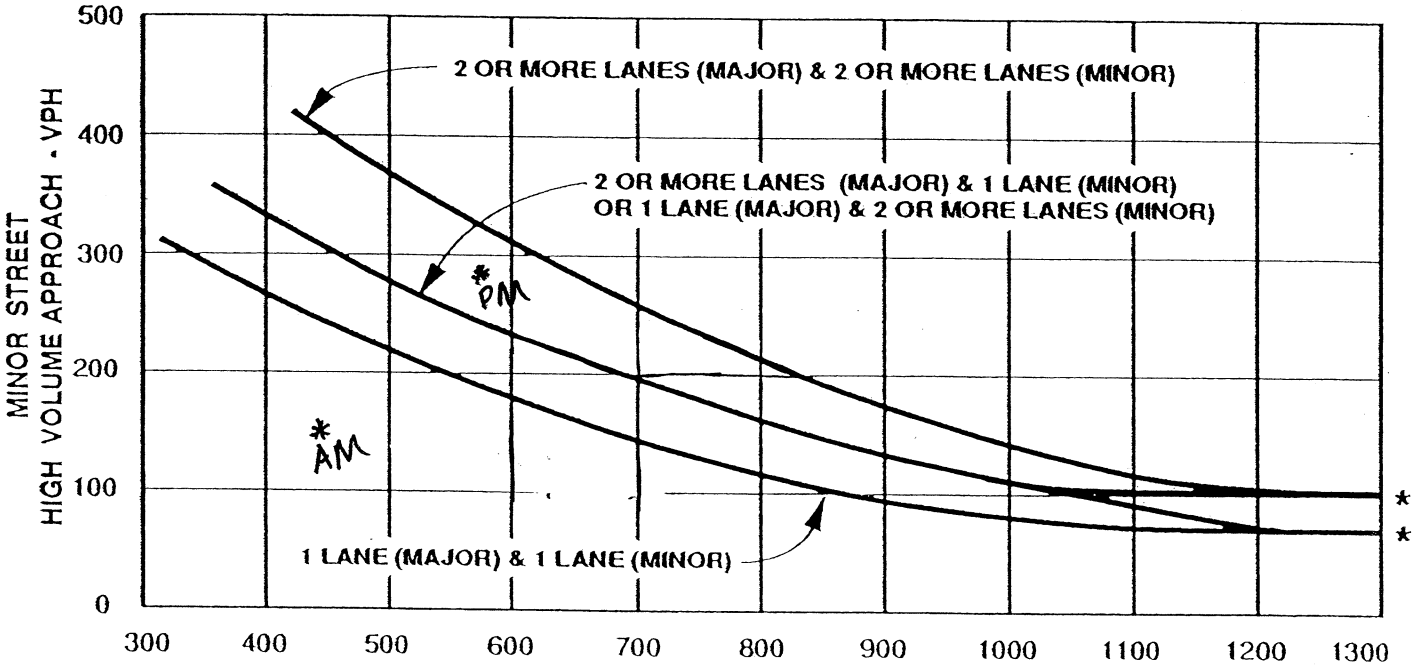
Minor Street: SR-14 SB Ramp

Scenario: Year 2006 Cumulative + Project (without Ave F) AM/PM Peak Hour

# of lanes in each approach

Major: 3

Minor: 2



AM = (444, 159)

PM = (599, 274)

* 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.

Warrant Satisfied? NO

Appendix C

Air Quality Analysis

DRAFT / Attorney-Client Privilege

Air Quality Technical Appendix
Lancaster
Operational Emissions

Prepared by: Environmental Compliance Solutions, Inc.

Prepared for: Waste Management

March 1, 2006

DRAFT / Attorney-Client Privilege

Lancaster
Operational Emissions
Summary

Maximum Daily Operational Emissions

	Operational Emissions (lb/day)				
Description	*ROG*	*CO*	*NOx*	*SOx*	*PM10*
Operational Emissions	17	82	289	3	126

Maximum Quarterly Operational Emissions

	Operational Emissions (ton/quarter)				
Description	*ROG*	*CO*	*NOx*	*SOx*	*PM10*
Operational Emissions	0.7	3.2	11.3	0.1	4.9

Notes:
Quarterly emissions = daily emissions x 6 days/week x 13 weeks/quarter

DRAFT / Attorney-Client Privilege

Lancaster
Operational Emissions

Daily Emissions

	Daily Emissions (lb/day)				
Equipment/Activity	*ROG*	*CO*	*NOx*	*SOx*	*PM10*
Compactor	1.6	7.2	22.1	-	1.0
Grinder	1.8	4.9	22.6	0.3	1.6
Haul Trucks	11.8	50.9	242.9	3.1	6.4
Worker commute vehicle	1.4	18.5	1.5	-	-
Fugitive Dust	-	-	-	-	116.9
Total	*16.6*	*81.5*	*289.1*	*3.4*	*125.9*

Equipment/Activity Descriptions

Equipment/Activity	*Hp Rating*	*Load Factor*	*Number Active*	*Equip-Hrs Day*	*Miles/ Day*	*Idling Min. Day*	Equipment Type
Compactor	340	0.575	1	6.0	-	-	Off-Road
Grinder	800	0.150	1	8.0	-	-	Off-Road
Haul Trucks	-	-	-	-	7,760	180	On-Road
Worker commute vehicle	-	-	20	-	54	-	On-Road

Notes:
Information based on 1993 SCAQMD CEQA Handbook (Tables A9-8-C and A9-8-D), project team, Caterpillar Handbook.
Haul Truck assumptions:

Roundtrips/day:	97	
Roundtrip length:	80	miles

Haul trucks assumed to idle 2.5 minutes total per roundtrip.

Emission Factors for Off-Road Equipment

	Emission Factors						
Equipment/Activity	*ROG*	*CO*	*NOx*	*SOx*	*PM10*	*Units*	*Reference*
Compactor	0.63	2.78	8.54	0.01	0.37	g/hp-hr	(1)
Grinder	37.5	102.0	469.0	7.1	33.5	lb/1000 gal	(2)

(1) Composite based on CARB OFFROAD Emissions Model (1999). SOx emission factor assumes fuel has maximum sulfur content of 15 ppmw (SCAQMD Rule 431.2 requirement effective as early as 1 January 2005).
(2) Grinder emission factors based on AQMD 2003-2004 Annual Emission Reporting Program, Table 2 (Default Emission Factors for Internal Combustion Engines (ICE) for Forms B2 and B2U), diesel/distillate oil.

Emission Factors for On-Road Heavy Duty Trucks

	Emission Factors						
Project Year/Mode	*ROG*	*CO*	*NOx*	*SOx*	*PM10*	*Units*	*Reference*
On-road Truck - Idle	4.41	26.30	80.70	0.34	1.84	grams/hr	(1)
On-road Truck - 5 mph	1.85	10.53	20.27	0.18	0.83	grams/mile	(1)
On-road Truck - 10 mph	1.45	7.26	16.81	0.18	0.79	grams/mile	(1)
On-road Truck - 25 mph	0.80	3.13	11.88	0.18	0.44	grams/mile	(1)
On-road Truck - 55 mph	0.44	1.98	15.47	0.18	0.24	grams/mile	(1)
On-road Trucks - Composite	0.69	2.97	14.17	0.18	0.38	grams/mile	(2)

(1) From CARB's EMFAC2002 (v2.2). Assumes: Heavy duty diesel truck (HHDT), Location: SCAQMD, Temp.: 70 F, Relative Humidity: 60%.
PM10 factors include PM10 from combustion only (tire wear and brake wear included with fugitive dust).
Based on EMFAC emission factors for Year 2006.
(2) Assumes 10% at 10 miles per hour (mph), 40% at 25 mph, and 50% at 55 mph. Although not included in this composite emission factor, daily emissions estimates (see below) include idling emissions.

Emission Factors for On-Road Vehicles

	Emission Factors						
Project Year/Mode	*ROG*	*CO*	*NOx*	*SOx*	*PM10*	*Units*	*Reference*
Worker Trips - 10 mph	0.92	11.15	0.79	0.01	0.04	grams/mile	(1)
Worker Trips - 25 mph	0.50	7.25	0.59	0.01	0.02	grams/mile	(1)
Worker Trips - 55 mph	0.40	5.71	0.59	0.00	0.01	grams/mile	(1)
Worker Trips - Composite	0.52	7.11	0.60	0.01	0.02	grams/mile	(2)

(1) From CARB's EMFAC2002 (v2.2). Units in grams/mile. Assumptions: Location: SCAQMD, Temperature: 70 F, Relative Humidity: 60%.
PM10 factors include PM10 from combustion only (tire and brake wear included with fugitive dust). Conservatively assumes light-duty trucks, composite (LDT1-ALL).
ROG emission factors includes evaporative running loss of 0.2017 grams/mile.
Based on EMFAC emission factors for Year 2006.
Starting emisions (grams/trip, after 600 minutes): ROG (1.52), CO (17.59), Nox (0.66), SOx (0.003), PM10 (0.015).
Starting emisions (grams/trip, after 60 minutes): ROG (0.862), CO (10.647), Nox (0.726), SOx (0.001), PM10 (0.008).
Hot soak emissions (grams/trip): ROG (0.326).
Partial day diurnal emissions (grams/hr): ROG (0.013).
Resting losses (grams/hr): ROG (0.077).
(2) Based on 5% at 10 miles per hour (mph), 35% at 25 mph, and 60% at 55 mph. Composite emission factor is used for worker commute vehicles.

DRAFT / Attorney-Client Privilege

Lancaster
Operational Emissions

Fugitive Dust

	Emissions (lb/day) - Before Mitigation				
Equipment/Activity	*ROG*	*CO*	*NOx*	*SOx*	*PM10*
Compactor	-	-	-	-	2.3
Grinder	-	-	-	-	75.0
Haul Trucks	-	-	-	-	36.6
Worker commute vehicle	-	-	-	-	3.0
Total	-	-	-	-	116.9

Notes:
Fugitive PM10 emissions for on-road vehicles also include break and tire wear.
Haul truck fugitive emissions assume 80% travel on freeways, 20% travel on major/collector roads (all paved).

Grinder

Description	Value		References/Notes
Grinding PM10 emission factor:	0.25	lb/ton	WM, SCAQMD AER
Greenwaste grinding rate:	300	ton/day	WM
PM10 Emissions:	75.0	lb/day	Uncontrolled
Annual diesel fuel consumption:	15,000	gal/yr	WM
Average daily diesel consumption:	48.1	gal/day	Averaged over 312 days (6 days/week, 52 weeks/yr)
Max. daily diesel fuel consumption:	48.1	gal/day	
(Daily emissions estimates use max. daily diesel fuel consumption.)			

Compactor:

PM10 emissions (lb/hr) = 0.75 * 1.0 * ([s]^1.5) / ([M]^1.4)

Description	Value		References/Notes
Surface material silt content (s):	8	%	Table A9-9-F-1, 1993 CEQA Handbook ("Overburden" dirt type = 7.5%)
Surface material moisture content (M):	15	%	Table A9-9-F-2, 1993 CEQA Handbook (Dry = 2.0%, Moist = 15.0%, Wet = 50.0%)
PM10 Emissions:	2.3	lb/day/unit	Uncontrolled (assumes 6-hr work day)

References:
AP42, Section 13.2.3 (Heavy Construction Operations), Table 13.2.3-1 (Recommended Emission Factors for Construction Operations, 1/95) and Table 11.9-1 (Emission Factor Equations for Uncontrolled Open Dust Sources at Western Surface Coal Mines, 7/98, Bulldozing Operations).
(Note: PM10 equation from 1993 CEQA Handbook, Table A9-9-F [Estimating Emissions from Dirt Pushing or Bulldozing Operations] is incorrect)

Passenger vehicle travel on paved roads:

Description	PM10 Emissions	References/Notes
Freeway:	0.0008 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Major/Collector Roads:	0.0012 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Local roads:	0.0040 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Composite (commute vehicle)	0.0028 lb/mile	Assumption (20% Local, 20% Major Street, 60% Freeway)

Truck travel on paved roads:

Description	PM10 Emissions	References/Notes
Freeway:	0.0043 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Major/Collector Roads:	0.0064 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Local roads:	0.0217 lb/mile	AP-42 Section 13.2.1, CARB Section 7.9
Composite (haul truck):	0.00472 lb/mile	Assumption (20% major/collector roads, 80% freeway)

Reference:
EPA AP-42 Section 13.2.1 (Paved Roads, 12/2003) and CARB Section 7.9 (Entrained Paved Road Dust, Paved Road Travel, July 1997)

PM10 Emissions (lb/VMT) = $k(sL/2)^{0.65} \times (W/3)^{1.5}$

Where: k = 0.016 (particle size multiplier for PM10), sL = road silt loading (grams per square meter) from CARB Methodology 7.9 for paved roads, W = vehicle weight (tons)
For Los Angeles County, sL = 0.02 g/m2 for freeways, 0.037 g/m2 for major/collector roads, 0.24 g/m2 for local roads.
For haul truck, assume W = 40 tons (Max. allowable weight on California freeways); for commute vehicle, assume W = 3 tons.

Lancaster EIR Air Quality Impacts from Grinder

Pollutant	Avg Time Factor	Emission lb/yr	Emission lb/hr	Concentration ug/m3	CAAQS or NAAQS, ug/m3
NOx 1-hr	1	7035	19.54	272.57	470
NOx Ann	0.08	7035	0.80	0.90	100
SOx 3-hr	0.9	106.5	0.30	3.71	1300
SOx 24-hr	0.4	106.5	0.10	0.55	365
SOx Ann	0.08	106.5	0.01	0.01	80
CO 1-hr	1	1530	4.25	59.28	23,000
CO 8-hr	0.7	1530	4.25	41.50	10,000
PM10 24-hr	0.4	502.5	0.47	2.60	50
PM10 Ann	0.08	502.5	0.06	0.06	20

Background, not included, must be added to conc. to compare with std.

360 short-term impacts based on using 15,000 gallons of diesel at design rating
110.7 X/Q at 500 meters from source using the SCREEN3 model

Lancaster EIR - Grinder Emissions

Rule 1401 Health Risk Assessment

No Engines	1	
Action:	Screening	
Rating (bhp):	820	
Annual Operation Hours (hr/yr):	360	Equivalent to 15,000 gallons annually
Fuel Type:	Diesel	
VOC Control Efficiency:	0%	
PM Control Efficiency:	0%	
Max fuel usage increase (1000 gal/hr):	0.0419	
Annual fuel usage increase (1000 gal/yr):	15.1	
Dispersion model used:	SCREEN3	
Building Downwash?	NO	
Terrain conditions:	FLAT	
Max. 1-Hr. X/Q	110.7	Property Line assumed at 500 meters
Resident 1-hr X/Q:	110.7	500 meters to nearest resident; used simple terrain value
Worker 1-hr X/Q:	110.7	500 meters to worker; used simple terrain value
1-hour to annual factor:	0.08	
Worker exposure adj. Factor (46yr/70yr):	0.66	

Substance	SDAPCD Emission Factor (lb/1000 gal)	Emission Rates				Max. 1-Hour (ug/m3)	Resident Ann. Conc. (ug/m3)	Worker Ann. Conc. (ug/m3)	Cancer Inh URF (ug/m3)-1	Cancer MPF
		Hourly		Annual						
		(lb/hr)	(g/sec)	(lb/yr)	(g/sec)					
DIESEL EMISSIONS SPECIATED										
Acetaldehyde	0.7833	3.28E-02	4.14E-03	1.18E+01	1.70E-04	4.58E-01	1.51E-03	1.51E-03	2.70E-06	1
Acrolein	0.0339	1.42E-03	1.79E-04	5.12E-01	7.36E-06	1.98E-02	6.52E-05	6.52E-05	n/a	n/a
Arsenic	0.0016	6.71E-05	8.45E-06	2.41E-02	3.47E-07	9.36E-04	3.08E-06	3.08E-06	3.30E-03	2.7
Benzene	0.1863	7.81E-03	9.84E-04	2.81E+00	4.04E-05	1.09E-01	3.58E-04	3.58E-04	2.90E-05	1
Beryllium	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	6.9
1,3-Butadiene	0.2174	9.11E-03	1.15E-03	3.28E+00	4.72E-05	1.27E-01	4.18E-04	4.18E-04	1.70E-04	1
Cadmium	0.0015	6.29E-05	7.92E-06	2.26E-02	3.26E-07	8.77E-04	2.88E-06	2.88E-06	4.20E-03	1
Chlorobenzene	0.0002	8.38E-06	1.06E-06	3.02E-03	4.34E-08	1.17E-04	3.84E-07	3.84E-07	n/a	n/a
CrVI	0.0001	4.19E-06	5.28E-07	1.51E-03	2.17E-08	5.85E-05	1.92E-07	1.92E-07	1.50E-01	1.01
Chromium (not VI)	0.0006	2.52E-05	3.17E-06	9.05E-03	1.30E-07	3.51E-04	1.15E-06	1.15E-06	n/a	n/a
Copper	0.0041	1.72E-04	2.17E-05	6.19E-02	8.90E-07	2.40E-03	7.88E-06	7.88E-06	n/a	n/a
Dioxins	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	n/a	n/a
Ethylbenzene	0.0109	4.57E-04	5.76E-05	1.64E-01	2.37E-06	6.37E-03	2.10E-05	2.10E-05	n/a	n/a
Formaldehyde	1.7261	7.24E-02	9.12E-03	2.60E+01	3.75E-04	1.01E+00	3.32E-03	3.32E-03	6.00E-06	1
Furans	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	n/a	n/a
Hexane	0.0269	1.13E-03	1.42E-04	4.06E-01	5.84E-06	1.57E-02	5.17E-05	5.17E-05	n/a	n/a
Hydrogen Chloride	0.1863	7.81E-03	9.84E-04	2.81E+00	4.04E-05	1.09E-01	3.58E-04	3.58E-04	n/a	n/a
Lead	0.0083	3.48E-04	4.38E-05	1.25E-01	1.80E-06	4.85E-03	1.60E-05	1.60E-05	1.20E-05	1
Manganese	0.0031	1.30E-04	1.64E-05	4.68E-02	6.73E-07	1.81E-03	5.96E-06	5.96E-06	n/a	n/a
Mercury	0.0020	8.38E-05	1.06E-05	3.02E-02	4.34E-07	1.17E-03	3.84E-06	3.84E-06	n/a	n/a
Naphthalene	0.0197	8.26E-04	1.04E-04	2.97E-01	4.28E-06	1.15E-02	3.79E-05	3.79E-05	n/a	n/a
Nickel	0.0039	1.63E-04	2.06E-05	5.89E-02	8.47E-07	2.28E-03	7.50E-06	7.50E-06	2.60E-04	1
PAHs (less naphthalene)	0.0362	1.52E-03	1.91E-04	5.46E-01	7.86E-06	2.12E-02	6.96E-05	6.96E-05	1.10E-03	12.7
Propylene	0.4670	1.96E-02	2.47E-03	7.05E+00	1.01E-04	2.73E-01	8.98E-04	8.98E-04	n/a	n/a
Selenium	0.0022	9.22E-05	1.16E-05	3.32E-02	4.78E-07	1.29E-03	4.23E-06	4.23E-06	n/a	n/a
Toluene	0.1054	4.42E-03	5.57E-04	1.59E+00	2.29E-05	6.16E-02	2.03E-04	2.03E-04	n/a	n/a
Xylenes	0.0424	1.78E-03	2.24E-04	6.40E-01	9.20E-06	2.48E-02	8.15E-05	8.15E-05	n/a	n/a
Zinc	0.0224	9.39E-04	1.18E-04	3.38E-01	4.86E-06	1.31E-02	4.31E-05	4.31E-05	n/a	n/a

SUM

Exceed Thresholds?? (10 in one million risk for cancer, 1.0 for chronic and acute HI)

Max. hrs/yr increase:

-- Ventura County APCD factors for IC engines used

-- Risk potency values are current as of May 3,2003 Rule 1401 guidelines

-- Chronic and Acute HI values summed across all target organs, and are conservative

-- The closer of a resident or sensitive receptor was selected

Lancaster EIR - Grinder Emissions

Rule 1401 Health Risk Assessment

No Engines	1
Action:	Screening
Rating (bhp):	820
Annual Operation Hours (hr/yr):	360
Fuel Type:	Diesel
VOC Control Efficiency:	0%
PM Control Efficiency:	0%
Max fuel usage increase (1000 gal/hr):	0.0419
Annual fuel usage increase (1000 gal/yr):	15.1
Dispersion model used:	SCREEN3
Building Downwash?	NO
Terrain conditions:	FLAT
Max. 1-Hr. X/Q	110.7
Resident 1-hr X/Q:	110.7
Worker 1-hr X/Q:	110.7
1-hour to annual factor:	0.08
Worker exposure adj. Factor (46yr/70yr):	0.66

Substance	SDAPCD Emission Factor (lb/1000 gal)	Chronic Inh REL (ug/m3)	Chronic MPF	Acute REL (ug/m3)	Acute REL Avg. Time (hrs)	MAX OFFSITE Acute HI	RESIDENT Cancer Risk	RESIDENT Chronic HI	WORKER Cancer Risk	WORKER Chronic HI
DIESEL EMISSIONS SPECIATED										
Acetaldehyde	0.7833	9.00E+00	1	n/a	n/a	n/a	4.07E-09	1.67E-04	2.67E-09	1.67E-04
Acrolein	0.0339	6.00E-02	1	1.90E-01	1	1.04E-01	n/a	1.09E-03	n/a	1.09E-03
Arsenic	0.0016	3.00E-02	5.7	1.90E-01	4	4.92E-03	2.74E-08	5.84E-04	1.80E-08	5.84E-04
Benzene	0.1863	6.00E+01	1	1.30E+03	6	8.38E-05	1.04E-08	5.97E-06	6.82E-09	5.97E-06
Beryllium	ND	7.00E-03	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1,3-Butadiene	0.2174	2.00E+01	1	n/a	n/a	n/a	7.10E-08	2.09E-05	4.67E-08	2.09E-05
Cadmium	0.0015	2.00E-02	16	n/a	n/a	n/a	1.21E-08	2.31E-03	7.96E-09	2.31E-03
Chlorobenzene	0.0002	1.00E+03	2.8	n/a	n/a	n/a	n/a	1.08E-09	n/a	1.08E-09
CrVI	0.0001	2.00E-01	1	n/a	n/a	n/a	2.91E-08	9.61E-07	1.91E-08	9.61E-07
Chromium (not VI)	0.0006	2.00E-03	1	n/a	n/a	n/a	n/a	5.77E-04	n/a	5.77E-04
Copper	0.0041	n/a	n/a	1.00E+02	1	2.40E-05	n/a	n/a	n/a	n/a
Dioxins	ND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	0.0109	2.00E+03	1	n/a	n/a	n/a	n/a	1.05E-08	n/a	1.05E-08
Formaldehyde	1.7261	3.00E+00	1	9.40E+01	1	1.07E-02	1.99E-08	1.11E-03	1.31E-08	1.11E-03
Furans	ND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Hexane	0.0269	7.00E+03	1	n/a	n/a	n/a	n/a	7.39E-09	n/a	7.39E-09
Hydrogen Chloride	0.1863	9.00E+00	1	2.10E+03	1	5.19E-05	n/a	3.98E-05	n/a	3.98E-05
Lead	0.0083	n/a	n/a	n/a	n/a	n/a	1.91E-10	n/a	1.26E-10	n/a
Manganese	0.0031	2.00E-01	1	n/a	n/a	n/a	n/a	2.98E-05	n/a	2.98E-05
Mercury	0.0020	9.00E-02	1.6	1.80E+00	1	6.50E-04	n/a	6.83E-05	n/a	6.83E-05
Naphthalene	0.0197	9.00E+00	1	n/a	n/a	n/a	n/a	4.21E-06	n/a	4.21E-06
Nickel	0.0039	5.00E-02	1	6.00E+00	1	3.80E-04	1.95E-09	1.50E-04	1.28E-09	1.50E-04
PAHs (less naphthalene)	0.0362	n/a	n/a	n/a	n/a	n/a	9.72E-07	n/a	6.39E-07	n/a
Propylene	0.4670	3.00E+03	1	n/a	n/a	n/a	n/a	2.99E-07	n/a	2.99E-07
Selenium	0.0022	2.00E+01	1	n/a	n/a	n/a	n/a	2.11E-07	n/a	2.11E-07
Toluene	0.1054	3.00E+02	1	3.70E+04	1	1.67E-06	n/a	6.75E-07	n/a	6.75E-07
Xylenes	0.0424	7.00E+02	1	2.20E+04	1	1.13E-06	n/a	1.16E-07	n/a	1.16E-07
Zinc	0.0224	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SUM						***0.12***	***1.1E-06***	***0.0061***	***7.5E-07***	***0.01***
Exceed Thresholds?? (10 in one million risk for cancer, 1.0 for ch						NO	NO	NO	NO	NO
Max. hrs/yr increase:						n/a	#REF!	#REF!	#REF!	#REF!

-- Ventura County APCD factors for IC engines used
-- Risk potency values are current as of May 3,2003 Rule 1401 g
-- Chronic and Acute HI values summed across all target organs
-- The closer of a resident or sensitive receptor was selected

LLRC Health Risk Assessment
Fuguitive Emissions
Cancer

Compound	CAS	Detected?	Concentration ppb	Rate, Flare[1] lb/hr	Rate, Max[2] lb/hr	Rate, Max g/sec	Ann. Conc ug/m3	Impact ug/m3	Inhalation Unit Risk 1/ug/m3	Risk	Risk Detected
Hydrogen sulfide	7783-06-4	Y	5740	7.52E-03	8.88E-03	1.12E-03	5.94	6.65E-03	NA	NA	NA
Benzene	71-43-2	Y	1050	3.35E-03	3.96E-03	4.99E-04	5.94	2.96E-03	2.90E-05	8.59E-08	8.59E-08
Benzyl chloride	100-44-7	N	50	7.44E-04	8.79E-04	1.11E-04	5.94	6.58E-04	4.90E-05	3.22E-08	NA
Chlorobenzene	108-90-7	Y	99	4.28E-04	5.06E-04	6.37E-05	5.94	3.78E-04	NA	NA	NA
Dichlorobenzene	106-46-7	Y	640	3.61E-03	4.26E-03	5.37E-04	5.94	3.19E-03	1.10E-05	3.51E-08	3.51E-08
1,1-dichloroethane	75-34-3	Y	1110	4.22E-03	4.98E-03	6.28E-04	5.94	3.73E-03	1.60E-06	5.97E-09	5.97E-09
1,2-dichloroethane	107-06-2	Y	99	3.78E-04	4.46E-04	5.63E-05	5.94	3.34E-04	2.10E-05	7.02E-09	7.02E-09
1,1-dichloroethylene	75-35-5	N	40	1.49E-04	1.76E-04	2.22E-05	5.94	1.32E-04	NA	NA	NA
Dichloromethane	75-09-2	Y	2450	8.00E-03	9.45E-03	1.19E-03	5.94	7.07E-03	1.00E-06	7.07E-09	7.07E-09
1,2-dibromoethane	106-93-4	N	30	2.17E-04	2.56E-04	3.23E-05	5.94	1.92E-04	7.10E-05	1.36E-08	NA
Perchloroethylene	127-18-4	Y	4640	4.22E-02	4.98E-02	6.28E-03	5.94	3.73E-02	5.90E-06	2.20E-07	2.20E-07
Carbon tetrachloride	56-23-5	N	30	1.77E-04	2.09E-04	2.63E-05	5.94	1.56E-04	4.20E-05	6.57E-09	NA
Toluene	108-88-3	Y	28700	9.97E-02	1.18E-01	1.48E-02	5.94	8.81E-02	NA	NA	NA
1,1,1-trichloroethane	71-55-6	Y	60	6.07E-04	7.17E-04	9.03E-05	5.94	5.37E-04	NA	NA	NA
Trichloroethene	79-01-6	Y	2700	3.36E-02	3.97E-02	5.00E-03	5.94	2.97E-02	2.00E-06	5.94E-08	5.94E-08
Chloroform	67-66-3	N	20	9.14E-05	1.08E-04	1.36E-05	5.94	8.08E-05	5.30E-06	4.28E-10	NA
Vinyl chloride	75-01-4	Y	516	1.48E-03	1.75E-03	2.20E-04	5.94	1.31E-03	7.80E-05	1.02E-07	1.02E-07
m-xylenes	1330-20-7	Y	13400	5.46E-02	6.45E-02	8.13E-03	5.94	4.83E-02	NA	NA	NA
o,p-xlyenes	1330-20-7	Y	1760	7.17E-03	8.47E-03	1.07E-03	5.94	6.34E-03	NA	NA	NA
Total HAP				2.68E-01	3.17E-01	lb/hr				5.75E-07	5.23E-07
					1.39E+00	tons/yr					

[1]Based on Flare test Jan 27, 2004
[2]Based on 2016 recovery estimates

127	2004 flare input rate, scfm
1003	2016 gas generation rate, scfm
853	2016 gas recovery rate, scfm

LLRC Health Risk Assessment
Fuguitive Emissions
Chronic

Compound	CAS	Detected?	Concentration ppb	Rate, Flare[1] lb/hr	Rate, Max[2] lb/hr	Rate, Max g/sec	Ann. Conc ug/m3	Impact ug/m3	REL ug/m3	HI	HI Detected
Hydrogen sulfide	7783-06-4	Y	5740	7.52E-03	8.88E-03	1.12E-03	5.94	6.65E-03	10.00	6.65E-04	6.65E-04
Benzene	71-43-2	Y	1050	3.35E-03	3.96E-03	4.99E-04	5.94	2.96E-03	60.00	4.94E-05	4.94E-05
Benzyl chloride	100-44-7	N	50	7.44E-04	8.79E-04	1.11E-04	5.94	6.58E-04	12.00	5.48E-05	NA
Chlorobenzene	108-90-7	Y	99	4.28E-04	5.06E-04	6.37E-05	5.94	3.78E-04	1000.00	3.78E-07	3.78E-07
Dichlorobenzene	106-46-7	Y	640	3.61E-03	4.26E-03	5.37E-04	5.94	3.19E-03	800.00	3.99E-06	3.99E-06
1,1-dichloroethane	75-34-3	Y	1110	4.22E-03	4.98E-03	6.28E-04	5.94	3.73E-03	NA	NA	NA
1,2-dichloroethane	107-06-2	Y	99	3.78E-04	4.46E-04	5.63E-05	5.94	3.34E-04	400.00	8.35E-07	8.35E-07
1,1-dichloroethylene	75-35-5	N	40	1.49E-04	1.76E-04	2.22E-05	5.94	1.32E-04	70.00	1.88E-06	NA
Dichloromethane	75-09-2	Y	2450	8.00E-03	9.45E-03	1.19E-03	5.94	7.07E-03	400.00	1.77E-05	1.77E-05
1,2-dibromoethane	106-93-4	N	30	2.17E-04	2.56E-04	3.23E-05	5.94	1.92E-04	0.80	2.40E-04	NA
Perchloroethylene	127-18-4	Y	4640	4.22E-02	4.98E-02	6.28E-03	5.94	3.73E-02	35.00	1.07E-03	1.07E-03
Carbon tetrachloride	56-23-5	N	30	1.77E-04	2.09E-04	2.63E-05	5.94	1.56E-04	40.00	3.91E-06	NA
Toluene	108-88-3	Y	28700	9.97E-02	1.18E-01	1.48E-02	5.94	8.81E-02	300.00	2.94E-04	2.94E-04
1,1,1-trichloroethane	71-55-6	Y	60	6.07E-04	7.17E-04	9.03E-05	5.94	5.37E-04	1000.00	5.37E-07	5.37E-07
Trichloroethene	79-01-6	Y	2700	3.36E-02	3.97E-02	5.00E-03	5.94	2.97E-02	600.00	4.95E-05	4.95E-05
Chloroform	67-66-3	N	20	9.14E-05	1.08E-04	1.36E-05	5.94	8.08E-05	300.00	2.69E-07	NA
Vinyl chloride	75-01-4	Y	516	1.48E-03	1.75E-03	2.20E-04	5.94	1.31E-03	26.00	5.03E-05	5.03E-05
m-xylenes	1330-20-7	Y	13400	5.46E-02	6.45E-02	8.13E-03	5.94	4.83E-02	700	6.90E-05	6.90E-05
o,p-xlyenes	1330-20-7	Y	1760	7.17E-03	8.47E-03	1.07E-03	5.94	6.34E-03	700	9.05E-06	9.05E-06
Total HAP				2.68E-01	3.17E-01	lb/hr				2.58E-03	2.27E-03
					1.39	tons/yr					

[1]Based on Flare test Jan 27, 2004
[2]Based on 2016 recovery estimates

127 2004 flare input rate, scfm
1003 2016 gas generation rate, scfm
853 2016 gas recovery rate, scfm

LLRC Health Risk Assessment
Fuguitive Emissions
Acute

Compound	CAS	Detected?	Concentration ppb	Rate, Flare[1] lb/hr	Rate, Max[2] lb/hr	Rate, Max g/sec	Ann. Conc ug/m3	Impact ug/m3	RFD ug/m3	HI	HI Detected
Hydrogen sulfide	7783-06-4	Y	5740	7.52E-03	8.88E-03	1.12E-03	123.14	1.38E-01	42.0	3.28E-03	3.28E-03
Benzene	71-43-2	Y	1050	3.35E-03	3.96E-03	4.99E-04	123.14	6.14E-02	1300.0	4.72E-05	4.72E-05
Benzyl chloride	100-44-7	N	50	7.44E-04	8.79E-04	1.11E-04	123.14	1.36E-02	240.0	5.68E-05	NA
Chlorobenzene	108-90-7	Y	99	4.28E-04	5.06E-04	6.37E-05	123.14	7.84E-03	NA	NA	NA
Dichlorobenzene	106-46-7	Y	640	3.61E-03	4.26E-03	5.37E-04	123.14	6.62E-02	NA	NA	NA
1,1-dichloroethane	75-34-3	Y	1110	4.22E-03	4.98E-03	6.28E-04	123.14	7.73E-02	NA	NA	NA
1,2-dichloroethane	107-06-2	Y	99	3.78E-04	4.46E-04	5.63E-05	123.14	6.93E-03	NA	NA	NA
1,1-dichloroethylene	75-35-5	N	40	1.49E-04	1.76E-04	2.22E-05	123.14	2.73E-03	NA	NA	NA
Dichloromethane	75-09-2	Y	2450	8.00E-03	9.45E-03	1.19E-03	123.14	1.47E-01	14000.0	1.05E-05	1.05E-05
1,2-dibromoethane	106-93-4	N	30	2.17E-04	2.56E-04	3.23E-05	123.14	3.98E-03	NA	NA	NA
Perchloroethylene	127-18-4	Y	4640	4.22E-02	4.98E-02	6.28E-03	123.14	7.73E-01	20000.0	3.87E-05	3.87E-05
Carbon tetrachloride	56-23-5	N	30	1.77E-04	2.09E-04	2.63E-05	123.14	3.24E-03	1900.0	1.71E-06	NA
Toluene	108-88-3	Y	28700	9.97E-02	1.18E-01	1.48E-02	123.14	1.83E+00	37000.0	4.94E-05	4.94E-05
1,1,1-trichloroethane	71-55-6	Y	60	6.07E-04	7.17E-04	9.03E-05	123.14	1.11E-02	68000.0	1.64E-07	1.64E-07
Trichloroethene	79-01-6	Y	2700	3.36E-02	3.97E-02	5.00E-03	123.14	6.16E-01	NA	NA	NA
Chloroform	67-66-3	N	20	9.14E-05	1.08E-04	1.36E-05	123.14	1.67E-03	150.0	1.12E-05	NA
Vinyl chloride	75-01-4	Y	516	1.48E-03	1.75E-03	2.20E-04	123.14	2.71E-02	180000.0	1.51E-07	1.51E-07
m-xylenes	1330-20-7	Y	13400	5.46E-02	6.45E-02	8.13E-03	123.14	1.00E+00	22000.0	4.55E-05	4.55E-05
o,p-xlyenes	1330-20-7	Y	1760	7.17E-03	8.47E-03	1.07E-03	123.14	1.31E-01	22000.0	5.97E-06	5.97E-06
Total HAP				2.68E-01	3.17E-01	lb/hr				3.55E-03	3.48E-03
					1.39E+00	tons/yr					

[1]Based on Flare test Jan 27, 2004
[2]Based on 2016 recovery estimates

127 2004 flare input rate, scfm
1003 2016 gas generation rate, scfm
853 2016 gas recovery rate, scfm

Appendix D

Noise Analysis

NOISE IMPACT ANALYSIS

LANCASTER LANDFILL AND RECYCLING CENTER (LLRC)

LOS ANGELES COUNTY, CALIFORNIA

Prepared for:

Keeton Kreitzer Consulting
Attn: Keeton Kreitzer
17782 East 17th Street, Suite 106
Tustin, California 92780

Date:

August 31, 2004

Project No.: P04-033

NOISE SETTING

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters which describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure ratioed to the faintest sound detectable by a keen human ear is called a decibel (dB).

Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale similar to the Richter scale used for earthquake magnitude is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting," written as dB(A). Any further reference to decibels in this report written as "dB" should be understood to be A-weighted values.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

LOS ANGELES COUNTY NOISE STANDARD

CNEL-based standards are used to make land use decisions as to the suitability of a given site for its intended use. They apply to those noise sources not amenable to local control such as on-road traffic, aircraft, trains, etc. There are no on-site uses that would require detailed consideration of any CNEL-based exterior noise standards. Project-related noise issues would center more on noise from increased landfill operations possibly impacting nearest residences rather than from site suitability to the ambient noise environment. Those noise sources that are not pre-empted from local control are regulated by ordinance. Noise levels from on land use crossing the property line of an adjacent property are regulated by Section 12.08.390 of the Los Angeles County Code. These standards are expressed in terms of a mean (50th percentile) noise level, with allowable excursions from the mean. The larger the excursion, the shorter the allowable deviation, up to a maximum of 20 dB above the mean standard. The County CNEL-based compatibility standards for pre-empted sources (traffic, aircraft) are generally less stringent than for sources regulated by ordinance in Section 12.08.390 of the County Code.

In the Los Angeles County Noise Ordinance allowable exterior noise levels for various land uses are shown in Table 1. An average noise level of 50 dB (50th percentile, or "L_{50}") by day and 45 dB L_{50} for residential areas at night is the standard applicable at the nearest homes. However, when these noise levels are already exceeded by ambient noise levels, then the ambient becomes the standard. For industrial properties, the allowable noise exposure is 70 dB, anytime. If ambient levels exceed this threshold, then the ambient becomes the standard. The ordinance also establishes the maximum allowable noise exposure for all land uses. In residential areas, daytime noise exposure is not to exceed 70 dB for any period of time, and nighttime noise exposure is not to exceed 65 dB for any period of time.

BASELINE NOISE LEVELS

Existing noise levels throughout the project vicinity derive almost exclusively from the vehicular sources on the streets in the area. Construction activities from current area-wide development create localized noise impacts around individual construction projects. These activities will cease at area build-out, but roadway traffic noise will increase in direct proportion to the number of vehicles on area roadways.

In order to best characterize ambient noise levels near the project site, long-term noise monitoring (48 hours) was conducted at the nearest sensitive receptor locations to the Lancaster Landfill and Recycling Center (LLRC) potentially exposed to landfill traffic noise. These homes are located approximately three fourths mile west of the facility. Measurements were made at two sites. Monitoring Site No. 1 is located on the north side of "F" Street, east of the "F" Street/Division Street intersection at existing single-family residences. Monitoring Site No. 2 located at the existing mobile home park located on the southwest corner of the "F" Street/ Division Street intersection. Noise monitoring locations in relation to project site are shown in Figure 1.

Ambient noise levels at each monitored site are as follows:

Site 1 **Single-Family Residences**	**Site 2** **Mobile Home Residences**
Day 1 CNEL: 62.6 dBA	Day 1 CNEL: 62.0 dBA
Day 2 CNEL: 63.6 dBA	Day 2 CNEL: 61.0 dBA

In the noise/land use compatibility matrix of the Los Angeles County General Plan Noise Element, levels of less than 65 dBA CNEL are considered acceptable for residential use in usable outdoor space such as patios, spas/pools, backyards, etc, due to on-road traffic sources. The measured levels are less than 65 dBA CNEL, and occur in front yards. Rear yards are farther setback from the roadway, and are also shielded by the homes themselves. Existing noise exposures at the nearest noise-sensitive land uses are therefore well within County standards.

Table 1

Los Angeles County Noise Standards

Noise Zone	Land Use (Receptor Property)	Time Intervals	Exterior Noise Level (dB) for Standard Number				
			1 (L_{50})	2 (L_{25})	3 ($L_{8.3}$)	4 ($L_{1.7}$)	5 (L_0)
I	Noise-Sensitive Area	Anytime	45	50	55	60	65
II	Residential Properties	10:00 p.m. to 7:00 a.m. (nighttime)	45	50	55	60	65
		7:00 a.m. to 10:00 p.m. (daytime)	50	55	60	65	70
III	Commercial Properties	10:00 p.m. to 7:00 a.m. (nighttime)	55	60	65	70	75
		7:00 a.m. to 10:00 p.m. (daytime)	60	65	70	75	80
IV	Industrial Properties	Anytime	70	75	80	85	90

Source: Los Angeles County Noise Ordinance, Exterior Noise Standards, Chapter 28.08, Part 3, Section 12.08.390.

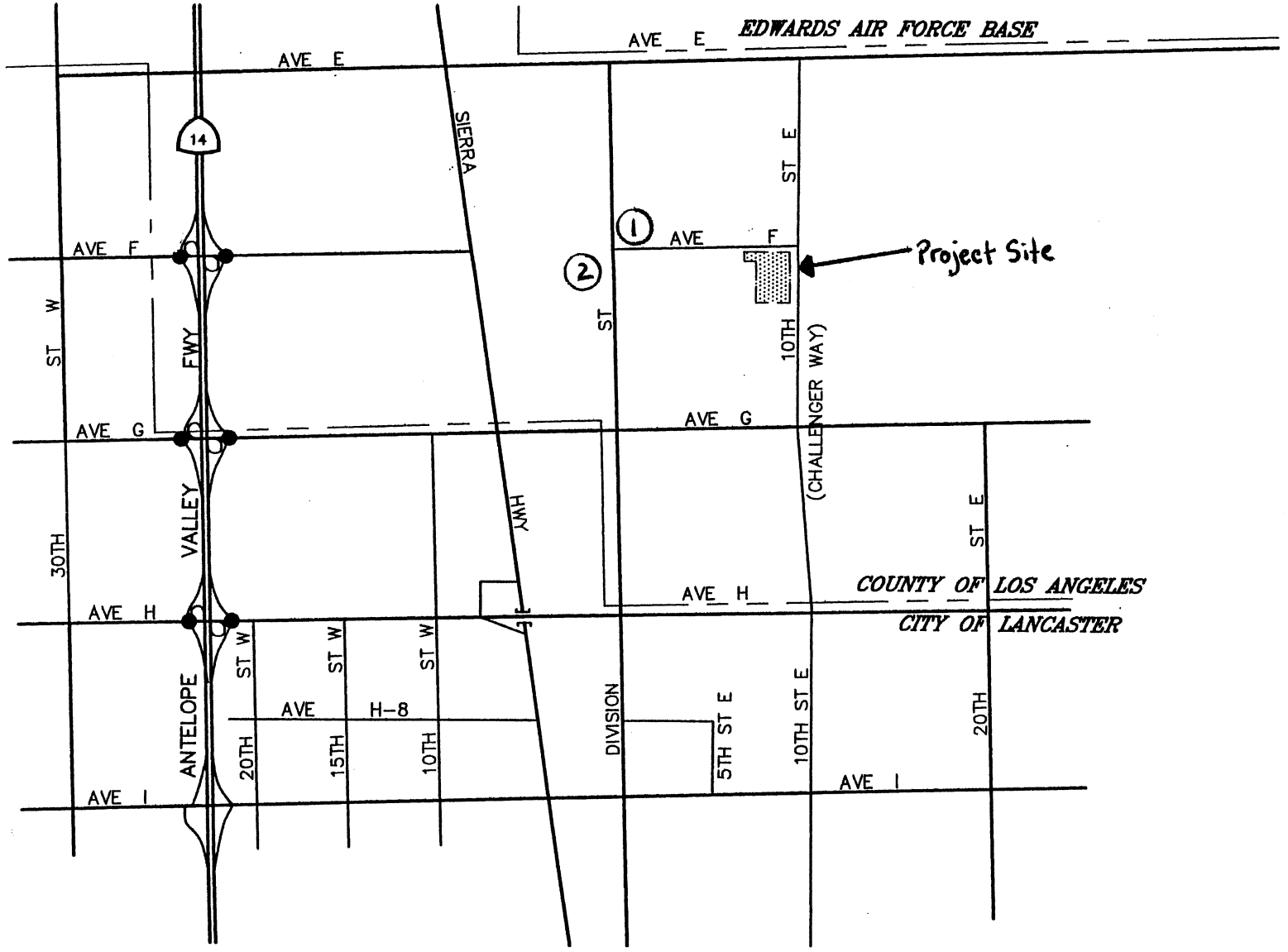
1. **Los Angeles County Noise Standard No. 1, L_{50}:** Noise levels which may not be exceeded for a cumulative period of more than 30 minutes in any hour. If the ambient L_{50} exceeds the levels listed above, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

2. **Los Angeles County Noise Standard No. 2, L_{25}:** Noise levels which may not be exceeded for a cumulative period of more than 15 minutes in any hour. If the ambient L_{25} exceeds the levels listed above, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

3. **Los Angeles County Noise Standard No. 3, $L_{8.3}$:** Noise levels which may not be exceeded for a cumulative period of more than 5 minutes in any hour. If the ambient $L_{8.3}$ exceeds the levels listed above, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.

4. **Los Angeles County Noise Standard No. 4, $L_{1.7}$:** Noise levels which may not be exceeded for a cumulative period of more than 1 minute in any hour. If the ambient $L_{1.7}$ exceeds the levels listed above, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.

5. **Los Angeles County Noise Standard No. 5, L_0:** Noise levels which may not be exceeded for any period of time. If the ambient L_0 exceeds the levels listed above, then the ambient L_0 becomes the exterior noise level for Standard No. 5.



N
NO SCALE

KEY

= PROJECT SITE (EXISTING LANDFILL)

(1) = Single Family Residences

(2) = Mobile Home Park

FIGURE 1

STUDY AREA

LANCASTER LANDFILL, COUNTY OF LOS ANGELES

In contrast to most residential communities, peak noise hours are generally mid-day from 10:00 a.m. to 2:00 p.m. rather than during the a.m. or p.m. commuting hours. The mid-day noise numbers are not dramatically different from the a.m. or p.m. commuting period. The difference is enough, however, to suggest that daytime landfill traffic has a more noticeable noise effect than the small number of local area commuters.

NOISE IMPACTS

Two characteristic noise sources are typically identified with land use intensification such as that proposed for the proposed Lancaster Landfill and Recycling Center (LLCR) expansion project. Because there are no planned construction activities associated with the project, there are no construction noise impacts. Any potential impacts are operational-related.

Increased landfill activities, especially increases in heavy equipment, could create noise impacts near the project site. Unless such activities occur near noise-sensitive residential uses, impact potential is minimal. Upon implementation, project-related increases in outbound and inbound haul trucks could cause an incremental increase in long-term, area-wide noise levels throughout the project area. Traffic noise impacts are generally analyzed both to insure that the project not adversely impact the acoustic environment of the surrounding community, as well as to insure that the project site is not exposed to an unacceptable level of noise resulting from the ambient noise environment acting upon the project. There are no project-siting constraints for the LLCR, therefore the focus of the noise analysis is on the community.

Project-related noise impacts may derive from on-road traffic, as well as from on-site landfill operations. The project-related area-wide traffic noise impact has already been incorporated into noise mitigation required for all residential and other noise sensitive development constructed adjacent to any of the circulation element and general plan roadways. Project-related noise impacts would derive almost exclusively from on-site noise sources possibly impacting the nearest adjacent residences.

THRESHOLDS OF SIGNIFICANCE

According to the most current CEQA Appendix G guidelines, noise impacts are considered potentially significant if they cause:

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 thus, noise levels exceeding the Los Angeles County Noise Standards would be considered significant.

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

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The term "substantial increase" is not defined, and is within the discretion of the lead agency to determine. The limits of perceptibility by ambient grade instrumentation (sound meters) or by humans in a laboratory environment is around 1.5 dB. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dB difference. A threshold of 3 dB is commonly used to define "substantial increase" by a variety of jurisdictions (City of Los Angeles CEQA Guidelines, City of San Diego CEQA Guidelines, etc.).

CONSTRUCTION NOISE IMPACTS

There are no proposed construction activities associated with this project.

ON-ROAD HAULING NOISE IMPACTS

Noise could increase as a result of project-related traffic and increases in hauling trucks. The proposed daily landfill disposal rate increase is designed to accommodate the demand for increased refuse from the growing population and from other landfill closures in Los Angeles County. The same vehicles and haul trucks would be on local roads driving out of county, or possibly out of state, for the same landfill resources if they were not available locally.

Project-related traffic noise was calculated for existing and near-term scenarios based upon existing traffic volumes and near-term forecasts. Six roadway segments were analyzed for four different scenarios (Year 2003 Existing, Year 2004 No Project; Year 2004 With Project, With Avenue "F" Extension; Year 2004 With Project, No Avenue "F" Extension. The vehicle mixes (truck percentages) observed on local area roadways were used to calculate vehicle noise.

The proposed increase in the daily disposal rate will derive mainly from a conversion from a vehicle fleet of packer trucks to one of transfer trailers. The noise model considers both types of trucks to have equal noise generation. The total traffic noise impact will derive from +27 trucks and a few operating personnel commuting trips. The results of the traffic noise impact analysis are shown in Table 2. The maximum increase in traffic noise attributable to the project is +0.6 dB along Avenue F, east of SR-14. Increases of +0.6 dB are undetectable even under laboratory conditions, and well below the +3 dB significance threshold.

Table 2 shows that traffic noise at 50 feet from the centerline of most project vicinity roadways is in the high 50 to mid-60 dB range. These predicted noise levels are mostly below the County land use standard for residential uses, and the project adds negligibly to these noise levels.

OPERATIONAL NOISE IMPACTS

Landfill operations noise impacts can occur as a result of on-site heavy equipment used in earthmoving activities and compaction processes, as well as on- and off-site on-road refuse haulers. Figure 2 shows the typical range of noise generation as a function of equipment used in landfill operations.

The earth-moving sources are seen to be the noisiest with equipment noise ranging up to about 90 dB(A) at 50 feet from the source. Measurements have shown, however, that the noise emission levels in Figure 2 tend to be more associated with periodic events under full load rather than chronic (hourly or longer) noise exposure. Short term noise generation thus tends to be on the higher end of the ranges shown in Figure 2, while longer term exposure is at the quieter end of the noise spectrum.

Table 2

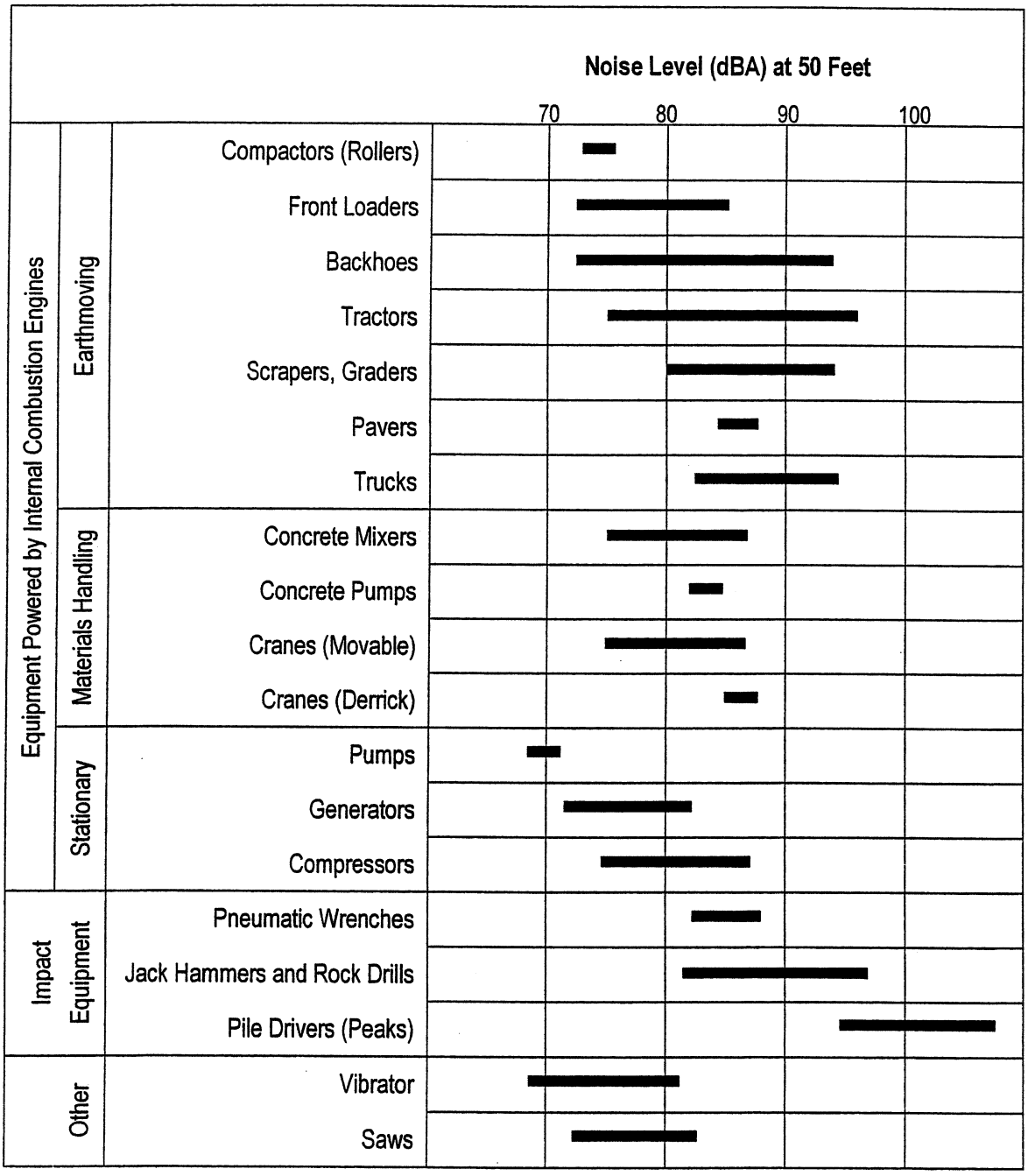
Traffic Noise Impact Analysis (dB CNEL)
(At 50 feet from roadway centerline)

Roadway/Segment	2003 Existing	2004 No Project	2004 With Project, With Ave. "F" Extension	2004 With Project, No Ave. "F" Extension
Avenue F:				
West of SR-14	58.1	58.4	58.4	58.4
East of SR-14	60.7	61.0	61.3	61.0
Avenue G:				
West of SR-14	N/A	N/A	47.8	47.8
East of SR-14	57.8	58.1	58.1	58.1
Avenue H:				
West of SR-14	64.5	64.8	64.8	64.8
East of SR-14	66.5	66.8	66.9	66.9

Source: FHWA-RD-77-108 (Calveno Mod.).

Figure 2

Typical Equipment Noise Generation Levels



Source: EPA PB 206717, Environmental Protection Agency, December 31, 1971, "Noise from Construction Equipment and Operations."

Spherically radiating point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance, or about 20 dB in 500 feet of propagation. The loudest earth-moving noise sources will therefore sometimes be temporarily detectable above the local background beyond 1,000 feet from any individual operations area. An extensive noise impact envelope requires a clear line of sight from source to receiver. Landfills have irregular terrain that changes over the life of the project. Terrain screening of heavy equipment reduces noise impacts to any nearby sensitive-source receivers.

The Lancaster Landfill and Recycling Center activities are regulated by specific sections of the Los Angeles County Noise Ordinance (e.g., Sections 12.08.380 and .390). These sections provide noise standards, as well as allowable hours of certain activities. As shown previously in Table 1, residential and industrial properties have different exterior noise standards. When adjacent properties in the County of Los Angeles have differing noise standard values, then the mean of the exterior noise levels becomes the standard (12.08.390C).

The noise compliance standards at the boundary between a residential and industrial property are as follows (dB):

Time	Mean (L_{50})	Maximum (Lmax)
7:00 a.m. to 10:00 p.m.	60	80
10:00 p.m. to 7:00 a.m.	57	77

Landfill equipment operates intermittently while excavating or hauling dirt, or while compacting refuse and cover soil. Equipment operates at full power for much less than 30 minutes per hour. The applicable noise performance standard is therefore the "Lmax" standard instead of the 50th percentile reading (L_{50}). There will be no substantial change in the number of pieces of heavy equipment operating at the landfill as a result of the proposed project. The noise "envelope" from a single piece of equipment with a 95 dBA "Lmax" at 50 feet is as follows:

Daytime Standard (80 dBA Lmax)	280 feet
Nocturnal Standard (77 dBA Lmax)	400 feet

The nearest semi-rural noise-sensitive land uses are located well beyond 400 feet from the landfill. There are no known recorded noise complaints from landfill operations filed with the Local Enforcement Agency (LEA) for this facility. There are no sensitive receivers currently exposed to excessive heavy equipment noise, and project implementation will not change that condition.

Sanitary landfills employ other activities as part of normal business operations that may impact the closest residences, mainly refuse unloading activities. The Los Angeles County Noise Ordinance addresses this issue in Section 12.08.460. Unloading operations between the hours of 10:00 p.m. and 6:00 a.m. are prohibited. While compliance would not result in a violation of County policy, single-event noise such as the "beep" from back-up alarms would be potentially intrusive because background noise conditions are low. Reasonable reduction of such maxima

noise is recommended as possibly nuisance abatement even though County policy may not be violated.

CONCLUSION

The proposed project would not exceed the Los Angeles County Noise Ordinance for anticipated site uses.

Appendix E

EIR 1993101036
Mitigation Monitoring & Reporting Program

TABLE 1

MITIGATION MONITORING PROGRAM
LANCASTER LANDFILL AND RECYCLING CENTER
County Case No. 93070
County of Los Angeles
(Glossary of Acronyms Attached)

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
GEOTECHNICAL			
• Prepare Earthquake Preparedness Plan as part of Emergency Response Plan.	Plan to be prepared as part of joint document for revised Solid Waste Facility Permit (SWFP) and amended Waste Discharge Requirements (WDRs) prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by Regional Water Quality Control Board (RWQCB).	LEA RWQCB
• Design interim slopes not to exceed gradient of 1.5:1.	Grading Plan to be prepared as part of SWFP and WDR joint support documents prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA
• Develop landfill in phases to limit acreage disturbed during each phase.	Phasing Plan to be prepared as part of SWFP support document prior to construction.	Approval of SWFP by LEA and CIWMB.	LEA
• Construct peripheral drainage channels around refuse prism.	Drainage Plan to be prepared as part of SWFP and WDR joint support documents prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB
• Continue implementation of dust control program.	Continuous, over life of the project.	Monthly inspections by LEA and compliance with Air Pollution Control District (APCD) fugitive dust control requirements.	LEA APCD

Feb 17 05 05:49p John Workman 8182523258 p.1

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
FLOOD HAZARD			
• In phases, construct diversion ditch around expansion area. Construct temporary ditches around each phase. Collect runoff in sedimentation ponds.	Drainage Plan to be prepared as part of SWFP and WDR joint support document prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB
• Periodic inspections of surface drainage facilities, vegetated soil cover areas, intermediate fill surfaces and on-site access roads. Daily inspections during periods of high-intensity rainfall.	Continuous, over life of the project.	Monthly inspections by LEA. Landfill operator will maintain records of inspections and actions taken to follow up on inspections.	LEA
• Seal cracks caused by settlement in intermediate and final cover resulting from heavy rainfall.	Continuous, over life of the project.	Monthly inspections by LEA. Landfill operator will maintain records of inspections and actions taken to follow up on inspections.	LEA
• Design and construct earth-berms and channels to direct runoff away from site.	Drainage Plan to be prepared as part of SWFP and WDR joint support document prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB
• Implement phasing plan to promote sheet flow to sedimentation basin for percolation and dust control.	Drainage Plan to be prepared as part of SWFP and WDR joint support document prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB
• Implement Phase II drainage plan to promote sheet flow to the northwesterly detention basin. Implement Phase III drainage plan to direct flow to outer perimeter channel.	Drainage Plan to be prepared as part of SWFP and WDR joint support document prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB

Feb 17 05 05:50p John Workman 8182523258 p.2

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
FLOOD HAZARD (continued)			
• In EEA, implement grading plan to direct flow to adjacent excavated cell and southerly channel. Pump water from excavated cells to designated sedimentation basins.	Drainage Plan to be prepared as part of SWFP and WDR joint support document prior to construction.	Approval of SWFP by LEA and CIWMB and WDRs by RWQCB.	LEA RWQCB
• Dedicate a 100-foot wide drainage easement along the east side of future 5th Street East for construction of a flood channel proposed in the Antelope Valley Flood Control and Water Conservation Plan.	Easement to be dedicated prior to construction of flood channel.	Grant of right-of-way offered to Los Angeles County Department of Public Works (LACDPW).	LACDPW
FIRE HAZARD			
• Implement measures described in Spill Countermeasure and Control Plan and Emergency Management Plan (required by State in CCR, Title 27) as listed on Pages 5.3-4 and 5.3-5 of Draft EIR.	Measures to be implemented in the event of a fire in a refuse area, in the 100-foot buffer zone around landfill, or in a structure on the project site.	Landfill operator will maintain records of inspections and actions taken to follow up on inspections.	LEA
• Maintain 100-foot wide buffer zone at the perimeter of the expansion areas.	Continuous, over the life of the project.	Periodic inspections by Fire Department.	Fire Department
• Implement procedures required by LA County Fire Department Fire Prevention Regulation No. 10 to ensure adequate access and provision and maintenance of facilities.	Continuous, over the life of the project.	Periodic inspections by Fire Department.	Fire Department
• Train operations personnel annually in fire prevention, fire extinguisher use and emergency response.	Continuous, over the life of the project.	Periodic inspections by Fire Department.	Fire Department

Feb 17 05 05:50p John Workman 8182523258 p.3

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
FIRE HAZARD (continued) • Remove debris and dust from undercarriages and engine compartments and check for oil and fuel leaks of landfill equipment and vehicles.	Continuous, over the life of the project.	Applicant shall keep maintenance records for all vehicles and equipment. Records available for review by LEA.	LEA
• Provide fire extinguishers on all landfill equipment and in the entrance and maintenance facilities.	Continuous, over the life of the project.	Monthly inspections by LEA.	LEA
NOISE • If residential development has occurred near landfill construction, limit construction hours to 7:00 a.m. to 7:00 p.m. No construction on weekends or Federal holidays.	Continuous, over the life of the project.	Monthly inspections by LEA, complaints by nearby residents.	LEA
• As development occurs in new cells, construct berms to limit off-site impacts.	Continuous, over the life of the project.	Monthly inspections by LEA.	LEA
• Tune equipment and maintain equipment noise mufflers.	Continuous, over the life of the project.	Applicant shall keep maintenance records for all vehicles and equipment. Records available for review by LEA.	LEA
WATER QUALITY • Design and construct leachate control and removal system (LCRS) to consist of collection pipes, collection sumps and liner as described in Figures 5.5-2 and 5.5-3 in Draft EIR.	Include liner/LCRS design in Design Report for SWFP and WDR joint support document.	Approval of Design Report by RWQCB.	RWQCB

Feb 17 05 05:50p John Workman 8182523258 p.4

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
WATER QUALITY (continued)			
• Periodic monitoring of surface water quality in accordance with site's existing Storm Water Pollution Prevention Plan (SWPPP).	Surface water quality to be monitored during the rainy season (October to April) for storms meeting sampling criteria contained in the Storm Water Monitoring Plan (SWMP).	Landfill operator will maintain records of monitoring actions and will include results in annual reports, as necessary, to the RWQCB.	RWQCB
• Implement a proactive Water Quality Monitoring Program in compliance with State and Federal regulations.	On-going over life of the project.	Approval of program by RWQCB.	RWQCB
• Decommission existing wells by pressure grouting or by another suitable method prior to landfill development, and strict adherence to the protocols for wells construction mandated by the California Department of Water Resources.	Submit well abandonment plan to RWQCB and obtain permit form L.A. County Department of Health Services (LACDHS) before construction.	Approval of plan by RWQCB and receipt of permit from LACDHS.	RWQCB, LACDHS
AIR QUALITY			
• Conduct engine feasibility study to determine whether equipment and vehicles can be powered with engines that meet on-highway standards. Evaluation to include utilization of turbocharged and intercooled diesel engines, and retardation of fuel injection.	Applicant to submit study to local APCD prior to expansion operations.	Evaluation of study by APCD.	APCD
• Tune-up and maintain landfill equipment in accordance with manufacturers schedules and specifications.	On-going over life of the project.	Applicant shall keep maintenance records for all vehicles and equipment. Records available for review by LEA.	LEA

Feb 17 05 05:50p John Workman 8182523258 p.5

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
AIR QUALITY (continued)			
• Instruct operators and supervisors to report any symptoms of performance which require maintenance.	Prior to start of expansion operations and as new employees operate equipment.	Applicant shall keep records showing appropriate employees trained. Records available for review by the LEA.	LEA
• Instruct equipment operators to shut down diesel equipment if it is expected to idle for more than ten minutes.	Prior to start of expansion operations and periodically as new employees operate equipment.	Applicant shall keep records showing appropriate employees trained. Records available for review by the LEA.	LEA
• Evaluate feasibility of employee ridesharing program.	Prior to start of expansion operations, applicant shall prepare rideshare feasibility study.	Evaluation of study by APCD.	APCD
• Continue existing dust suppression measures on unpaved roads, in borrow areas, and at working face of landfill.	Daily over life of the project.	Monthly inspections by LEA and compliance with APCD fugitive dust control requirements.	LEA APCD
• Continue to operate landfill gas collection and combustion system in accordance with governing APCD regulations.	Daily over the life of the project.	Quarterly submittal of gas monitoring results to APCD.	APCD
• Continue to monitor surface emissions and gas migration as required by the APCD, the L.A. County Department of Public Works (LACDPW) in L.A. County Building Code, Section 110.3 and the LEA in CCR, Title 27, as applicable.	Quarterly or as required by agencies.	Quarterly submittal of gas monitoring results to APCD and as required by each responsible agency.	APCD, LACDPW, LEA

Feb 17 05 05:51p John Workman 8182523258 p.6

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
AIR QUALITY (continued)			
• Install landfill gas migration monitoring probes around the perimeter of the expansion areas.	Prior to development in the WEA and EEA, develop landfill gas monitoring plan, with probe locations and spacing in accordance with LEA, APCD and LACDPW requirements.	Review of plan by LEA, APCD and LACDPW.	LEA, APCD, LACDPW
ODORS			
• Conduct regular visual inspections of landfill cover and monitor gas emissions in accordance with governing APCD and CCR, Title 27 regulations.	Quarterly over the life of the project.	Applicant shall keep inspection records and submit quarterly air-sampling results to APCD and LEA.	APCD, LEA
• Apply daily cover at the working face of the landfill.	Daily, over the life of the project.	Monthly inspections by LEA.	LEA
• In the event that an odor complaint is verified by LEA to be related to the disposal of sludge, LEA may order movement or suspension of sludge disposal operations.	Verification of complaint by LEA.	Verification of complaint by LEA.	LEA
BIOTA			
• Revegetate completed landfill cells.	Revegetate after completion of each phase of the project.	Inspection by LEA after completion of each phase of project.	LEA
• Restrict size of working face of landfill to one acre or less to reduce attraction of unwanted species.	Continuous, over the life of the project.	Monthly inspection by LEA.	LEA

Feb 17 05 05:51p John Workman 8182523258 P.7

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
BIOTA (continued)			
• Conduct pre-construction surveys to ensure that no sensitive plant species are found within project boundaries.	Complete surveys prior to start of expansion operations.	Review of survey by California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS) and compliance with any necessary action.	CDFG USFWS
• Verify whether 0.4 acre desert meadow habitat in northern edge of EEA constitutes a jurisdictional wetland.	Prior to construction, applicant shall complete wetlands delineation survey.	Review of survey by US Army Corps of Engineers and compliance with any necessary action.	USACE
• Prior to construction activities in the EEA, perform a botanical survey to establish existing vegetation densities in order to develop revegetation seed mixes.	Prior to construction of the EEA.	Review of survey by CDFG and USFWS and compliance with any necessary action. DRP to be copied.	CDFG, USFWS, DRP
• Conduct timely surveys to determine the presence or absence of the desert tortoise. If found, coordinate with the CDFG and USFWS in implementing relocation program.	Prior to construction.	Coordination with the CDFG and USFWS. DRP to be informed of survey results.	CDFG, USFWS, DRP
CULTURAL AND PALEONTOLOGICAL IMPACTS			
• Cease operations if cultural resources are encountered during any phase of construction. If Indian remains encountered, contact Native Indian Advisor of the local tribe as well as County Coroner.	During construction.	Applicant shall retain qualified expert to oversee testing and removal of resources.	DRP

Feb 17 05 05:51p John Workman 8182523258 p.8

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
CULTURAL AND PALEONTOLOGICAL IMPACTS (continued) • Retain qualified paleontologist to perform periodic inspections and, if necessary, salvage exposed fossils. The Paleontologist shall be allowed to divert or direct grading in the area of an exposed fossil. As necessary, samples shall be collected with fine mesh screens. Implement other measures listed on Page 5.8-10 of Draft EIR.	Retention of qualified paleontologist by applicant prior to construction.	Records of expert shall be reviewed, as necessary, by DRP.	DRP
TRAFFIC • Contribute on a fair share pro-rata basis to the cost to reconstruct the pavement of Avenue F between Division Street and 10th Street East and 10th Street East between Avenue F and Avenue G.	Reach agreement with LACDPW over pro-rata share prior to pavement reconstruction.	Agreement with the LACDPW.	LACDPW
ENVIRONMENTAL SAFETY • Continue to implement provisions of Special Waste Identification Plan (SWIP) to identify potential sources of hazardous wastes. Maintain signs that indicate that hazardous materials and liquid wastes are not accepted.	Continuous, over the life of the project.	Monthly inspections by LEA.	LEA

Feb 17 05 05:52p John Workman 8182523258 p.9

FEIR Issue and Mitigation Measure	Timing	Monitoring Action Indicating Compliance with Mitigation	Monitoring Responsibility
ENVIRONMENTAL SAFETY (continued)			
• Continue to implement Hazardous Waste Exclusion Program (HWEP) to randomly check loads of incoming waste for hazardous materials.	Daily or as required by the LEA.	Applicant shall maintain records of all load-checks and records of disposition of all materials detected in program.	LEA
• Store materials in designated on-site storage area for less than 90 days. Materials to be removed by licensed transporter.	When materials found at working face of landfill and generator is unknown.	Applicant shall maintain logs documenting type and volumes of materials detected, manifests, and identity of licensed transporter.	LEA
• Continue to utilize a radiation detector at the scale house to detect presence of radioactive materials and prevent their disposal at the site.	Daily or as required by the LEA.	Monthly inspections by LEA.	LEA
VISUAL QUALITY			
• Utilize berms, where practical, to screen views of working face of the landfill from nearby residential areas.	As each new lift is constructed, construct berm, as necessary, to obstruct views from adjacent residential areas.	Monthly inspections by LEA.	LEA
• Vegetate berms with intermediate vegetative cover.	Upon placement of interim cover on berms.	Monthly inspection by LEA and periodic inspection by DRP.	LEA DRP
• Coordinate with County of Los Angeles Department of Parks and Recreation and Antelope Valley Trails, Recreation and Environmental Council (AVTREC) to relocate rural trail currently proposed through the EEA.	Prior to grading in the EEA.	Approval by the County of Los Angeles Department of Parks and Recreation and coordination with AVTREC.	County of Los Angeles Department of Parks and Recreation

Feb 17 05 05:52p John Workman 8182523258 P.10