#### **APPENDICES**

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**TECHNICAL TRAFFIC EVALUATION** 

# APPENDIX A ENVIRONMENTAL ASSESSMENT FORM (EAF)

## CITY OF LOS ANGELES DEPARTMENT OF CITY PLANNING

| ENVIRONMENTAL ASSESSMENT FORM                    |   |  |  |  |  |
|--|---|--|--|--|--|
| EAF Case No.: ZA Case No.:                       | CPC Case No.:                                 |  |  |  |  |
| Council District No.: 12 (Englander) Community F | Plan Area: <u>Granada Hills – Knollwood</u>   |  |  |  |  |
| PROJECT ADDRESS: 16201-16301 San Fernar          | ndo Mission Blvd. / 11147-11155 Woodley Ave   |  |  |  |  |
| Major Cross Streets: San Fernando Mision Blvd &  | & Woodley Ave                                 |  |  |  |  |
| Name of Applicant: Harridge Development Group    | (Attn: Marc Annotti)                          |  |  |  |  |
| Address: 6363 Wilshire Boulevard, Los Angel      | es, CA 90048                                  |  |  |  |  |
| Telephone No.: (310) 658-1511                    | _Fax No.:                                     |  |  |  |  |
| E-mail: mannotti@msn.com                         |   |  |  |  |  |
| OWNER  | APPLICANT'S REPRESENTATIVE (Other Than Owner) |  |  |  |  |
| Name:  | Name: Rosenheim & Associates, Inc.            |  |  |  |  |
| Gelb Enterprises, a California LP                | Attn: Brad Rosenheim & Erika Iverson          |  |  |  |  |
| Address: 17547 Ventura Boulevard                 | Address: 21600 Oxnard Street, Suite 630       |  |  |  |  |
| Encino, CA 91316                                 | Woodland Hills, CA 91367                      |  |  |  |  |
| Telephone No.: 818-377-2277                      | Telephone No.: (818) 716-2787                 |  |  |  |  |
| Signature:                                       | Signature:                                    |  |  |  |  |
| <u> </u>   | (Applicant's Representative)                  |  |  |  |  |

The following Exhibits are required (3 copies of each exhibit and 3 Environmental Assessment Forms for projects in Coastal & S.M. Mtn. Zones): All Exhibits should reflect entire project, not just area in need of zone change, variance, or other entitlement.

NOTE: The exhibits are IN ADDITION TO those required for any case for which the Environmental Assessment Form is being filed.

- A. 2 <u>Vicinity Maps:</u> (8-1/2" x 11") showing nearby street system, public facilities and other significant physical features (similar to road maps, Thomas Brothers Maps, etc.) with project area highlighted.
- B. <u>2 Radius/Land Use Maps:</u> (1"=100' scale) showing land use and zoning to 500 feet (100 feet of additional land use beyond the radius for alcoholic beverage cases); l00' radius line (excluding streets) okay for Coastal building permits 300' for site plan review applications.
- C. <u>2 Plot Plans:</u> showing the location and layout of proposed development including, dimensions; include topographic lines where grade is over 10%; tentative tract or parcel maps where division of land is involved to satisfy this requirement, and the location and diameter of all trees existing on the project site.
- D. <u>Application:</u> a duplicate copy of application for zone change, (including Exhibit "C" justification) batch screening form, periodic comprehensive general plan review and zone change map, variance, conditional use, subdivider's statement, etc.
- E. Pictures: two or more pictures of the project site showing walls, trees and existing structures.
- F. Notice of Intent Fee: an UNDATED check in the amount of \$75 made out to the County of Los Angeles for the purpose of filing a Notice of Intent to Adopt a Negative Declaration as required by § 15072 of the State CEQA Guidelines.
- G. <u>Hillside Grading Areas/Haul Route Approval:</u> Projects within a Hillside Grading Area involving import/export of 1,000 cubic yards or more shall submit a soils and/or geotechnical report reviewed & approved b LADBS (reports needed to be determined by LADBS) to include measures to mitigate impacts related to grading and obtain a Haul Route Approval from the Board of Building & Safety Commissioners (refer to <a href="http://www.lacity.org/LADBS/forms/forms.htm">http://www.lacity.org/LADBS/forms/forms.htm</a>).

| APPLICATION ACCEPTED BY: |       |
|--------------------------|-------|
| RECEIPT NO.:             | DATE: |

#### I Project Description:

Briefly describe the project and permits necessary (i.e., Tentative Tract, Conditional Use, Zone Change, etc.) including an identification of phases and plans for future expansion:

The proposed Project consists of the demolition of an approximately 94,098 SF commercial shopping center for the construction, use and maintenance of a mixed-use development consisting of 440 residential apartment units over 64,650 square feet of ground floor commercial floor area and a basement and one subterranean level of parking. The Applicant is seeking a Divison of Land Vesting Tentative Tract Map (VTTM 74392) for the merger and resubdivision for a single lot for condominium purposes; a Site Plan Review Approval for a development that results in an increase of 50 or more residential units; a Project Permit Compliance Approval to permit a project within the geographical boundaries of the Granda Hills Specific Plan; a Denisty Bonus approval inlcuding one on-menu incentive for 20% increase in height. See **Attachment A – Background Information** for additional information.

Will the project require certification, authorization, clearance or issuance of a permit by any federal, state, county, or environmental control agency, such as Environmental Protection Agency, Air Quality Management District, Water Resources Board, Environmental Affairs, etc.? If so, please specify:

No certifications, authorizations, clearances and/or issuance of permits by any federal, state, county, or environmental control agency are anticpated for the above-described proposed Project.

| _     |  |
|-------|--|
| II. I | Existing Conditions:   |
| A. F  | Project Site Area Approx. 342,645 square feetNet andGross  |
| B. F  | Existing Zoning: C1-1VL  |
|       | Existing Use of Land: Commercial Shopping Center   |
|       | Existing General Plan Designation: Neighborhood Commercial   |
|       | Requested General Plan Designation: No Change  |
|       | Number: 3 type: Commercial and age +/-34-55 years of structures to be removed as a                           |
|       | result of the project. If residential dwellings (apts., single-family, condos) are being removed indicate    |
|       | the: number of units: N/A and average rent: N/A  |
|       | Is there any similar housing at this price range available in the area? If yes, where N/A                    |
|       | Number 32 , Trunk Diameter 8+ inches and type various of existing trees.                                     |
|       | Number 32 , Trunk Diameter 8+inches and type various of trees being removed (identify                        |
|       | on plot plan)  |
|       | Slope: State percent of property which is:   |
|       | 100% Less than 10% slope 10-15% slopeover 15% slope  |
| 7     | If slopes over 10% exist, a topographic map will be required. Over 50 acres, 1 " = 200' scale is okay        |
|       | Check the applicable boxes and indicate the condition of the Plot Plan: There are ☑ natural or man-          |
|       | made drainage channels, $\square$ rights of way and/or $\square$ hazardous pipelines crossing or immediately |
|       | adjacent to property, or $\square$ none of the above.  |
|       | Grading: (specify the total amount of dirt being moved)  |
| o.    | 0 - 500 cubic yards  |
| -     | 165,000 CY if over 500 cubic yards, indicate amount of cubic yards.  |
| _     | Import/Export: Indicate the amount of dirt being imported or exported 165,000CY export .                     |

If project involves more than one phase or substantial expansion or changes of <u>existing</u> uses, please document each portion separately, with the total or project details written below. Describe entire project, not just area in need of, zone change, variance, or other alteration.

| III.   | Residential project (if not residential, do <u>not</u> answer)   |
|--------|--|
| A.     | Number of Dwelling Units   |
|        | Single Family Apartment 440 or Condominium   |
| B.     | Number of Dwelling Units with:   |
|        | Studios 142 One bedroom 153 Two Bedrooms 123   |
| $\sim$ | Three BedroomsFour or more bedrooms Total number of parking spaces provided585 stalls for residenital uses   |
|        | List recreational facilities of project. 3 outdoor courtyards, including a pool coutyard, a clubhouse,   |
| υ.     | a desingated dog run area and private balconies.   |
| E.     | Approximate price range of units \$ to \$  |
| F.     | Number of stories Maximum of four-stories , height NTE 54 feet.  |
|        | Type of appliances and heating (gas, electric, gas/electric, solar)  |
|        | Gas heated swimming pool?  |
| Н.     | Describe night lighting of the project Down directed lighting (include plan for shielding light from   |
|        | adjacent uses, if available)   |
| I.     | Percent of total project proposed for: Building 54%  |
|        | Paving 33% Landscaping 13%   |
| 1      | Total number of square feet of floor area ± _414,133 SF  |
|        |  |
| IV.    | Commercial, Industrial or Other Project (if project is only residential do not answer this section). Describe entire project, not just area in need of zone change, variance, or other alteration. |
| Α.     | Type of use: Ground Floor Commercial   |
|        | Total number of square feet of floor area 64,650 SF Commercial Floor Area  |
|        | Number of units if hotel/motel N/A   |
| D.     | Number of stories <u>maximum of four-stories</u> , height <u>54</u> feet.  |
|        | Total number of parking spaces provided: 352 stalls for commercial uses  |
|        | Hours of operation 7am-11pm Days of operation Seven days a week  |
|        | If fixed seats or beds involved, number  |
| н.     | Describe night lighting of the project <u>Low level security lighting along walkways, down directed lighting in parking areas</u>  |
| ı      | Number of employees per shift unknown at this time   |
|        | Number of students/patients/patrons unknown at this time   |
|        | Describe security provisions for project Residential parking areas and lobby access will be  |
|        | regulated by lock door or gates. Security lighting along walkways and parking areas.   |
| L.     | Percent of total project proposed for: Building 54%  |
|        | Paving 33%   |
|        | Landscaping 13%  |
| His    | storic/Architectural Significant Project   |
|        | es the project involve any structures, building, street lighting systems, spaces, sites or components  |
|        | reof which may be designated or eligible for designation in any of the following: (please check)   |
|        | □ National Register of Historic Places_  |
|        | National Register of Historical Places     California Register of Historical Resources   |
|        | ☐ City of Los Angeles Historic Cultural Monuments  |
|        | □ Within the City of Los Angeles Historic Preservation Overlay Zone (HPOZ)   |

| ٧.  | Hazardous Materials and Substances Discharge   |
|-----|--|
|     | es the project involve the use of any hazardous materials or have hazardous substance discharge? so, please specify. No known hazardous materials or hazardous substance discharges.   |
|     | A. Regulatory Identification Number (if known) N/A  B. Licensing Agency N/A  C. Quantity of daily discharge N/A  |
| VI. | Stationary Noise Clearance - A clearance may be necessary certifying the project's equipment (i.e., air conditioning) complies with City Noise Regulations.  |
| So  | me projects may require a Noise Study. The EIR staff will inform those affected by this requirement.   |
| VII | . Selected Information:  |
| A.  | Circulation: Identify by name all major and secondary highways and freeways within 1,000 feet of the proposed project; give the approximate distance(s):   The Project Site is adjacent to Sar Fernando Mission Blvd, a street desingated Avenue I and is adjacent to Woodley Avenue, a street desingated as Avenue II. The 118 freeway is located approximately 600 feet to the west. |
| B.  | Air: All projects that are required to obtain AQMD permits (see AQMD Rules and Regulations) are required to submit written clearance from the AQMD indicating no significant impact will be created by the proposed project.*  |
| VII | I. Mitigating Measures:  |
|     | Feasible alternatives or mitigation measures which would substantially lessen any significan adverse impact which the development may have on the environment.    To be determined by the results of the Initial Study   |
|     | Contact the South Coast Air Quality Management District at (909) 396-2000 for further information.   |

# APPLICANT/CONSULTANT'S AFFIDAVIT OWNER MUST SIGN AND BE NOTARIZED; IF THERE IS AN AGENT, THE AGENT MUST ALSO SIGN AND BE NOTARIZED

| I,   | l,   |
|--|--|
| Owner (Owner in Escrow)* (Please Print)  | Consultant* (Please Print)   |
| Signed:  | Signed:  |
| Owner  | Agent  |
| being duly sworn, state that the statements and infor are in all respects true and correct to the best of my l | mation contained in this Environmental Assessment Form knowledge and belief.   |
| ******* Space Below This I   | _ine for Notary's Use **********************************   |
| ALL-PURPOSE  | ACKNOWLEDGEMENT  |
| State of California  |  |
| County of  |  |
| On before me   | personally (insert name and title of the officer)  |
| person(s) whose name(s) is/are subscribed to the w executed the same in his/her/their authorized cap           | oved to me on the basis of satisfactory evidence to be the rithin instrument and acknowledged to me that he/she/their pacity(ies), and that by his/her/their signature(s) on the which the person(s) acted, executed the instrument. |
| I certify under PENALTY OF PERJURY under the la is true and correct.   | aws of the State of California that the foregoing paragrapl  |
| WITNESS my hand and official seal.   |  |
|  |  |
| (Sea   | I)   |
| Signature  |  |

# APPENDIX B AIR QUALITY REPORT

## AIR QUALITY IMPACT ANALYSIS

#### FOR THE

# WOODLEY & SAN FERNANDO MISSION MIXED-USE PROJECT

#### Prepared for:

EcoTierra Consulting 555 W 5th Street, 31st Floor Los Angeles, CA 90013

Prepared by:

Cadence Environmental Consultants
Camarillo, CA 93010
805-504-2140



August 2016

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#### AIR QUALITY IMPACT ANALYSIS

#### FOR THE

## WOODLEY & SAN FERNANDO MISSION MIXED-USE PROJECT

#### INTRODUCTION

This Air Quality Impact Analysis has been prepared to evaluate the potential air quality impacts associated with the proposed Woodley & San Fernando Mission mixed-use project. The purpose of this analysis is to identify the construction-related and operational air pollutant emissions that would be generated by the proposed project and compare these with the thresholds of significance recommended by the South Coast Air Quality Management District (SCAQMD) and utilized by the City of Los Angeles.

This Air Quality Impact Analysis will be used to support the Mitigated Negative Declaration that is prepared for the proposed project.

#### **SUMMARY**

Implementation of the proposed project would not conflict with or obstruct implementation of the 2012 Air Quality Management Plan (AQMP).

The mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, construction and operation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

The mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, the proposed project would not generate a cumulatively considerable net increase of criteria pollutants.

Localized emissions generated by the proposed project would not expose receptors in the vicinity of the project site to substantial pollutant concentrations.

Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.

#### PROJECT DESCRIPTION

The proposed project site is located at 11147 N. Woodley Avenue and 16201–16301 W. San Fernando Mission Boulevard in the Granada Hills-Knollwood community of the City of Los Angeles. The site is largely bounded by Woodley Avenue on the east, San Fernando Mission Boulevard on the south, the Bull Creek storm channel on the west, and sports fields associated with John F. Kennedy High Schools to the north. A parcel containing a Taco Bell restaurant at the northwestern corner of Woodley Avenue and San Fernando Mission Boulevard is not part of the project site. Single family residences are located further to the east, south, and west of the site across the roadway and storm channel.

The project site is approximately 7.95 acres (346,245 square feet) in area and is currently developed with a 75,391 square-foot commercial center consisting of three buildings which include a 35,000-square-foot DMV office, 6,200 square feet of medical office, 12,410 square feet of restaurants (10,000-square-foot Chuck E Cheese, 1,050-square-foot Golden Wall Chinese, and 1,360-square-foot House of Grill), a 1,250-square-foot fast food restaurant without drive through (Mighty Mouth Burgers), 19,257 square feet of retail, and 1,274 square feet of space used for religious services. The site also includes surface parking and a batting cages facility. The existing commercial center has two driveways on San Fernando Mission Boulevard and two driveways on Woodley Avenue. Paved asphalt parking lots are located in the northeastern, eastern, and southern portion of the project site.

The project site has a General Plan land use designation of Community Commercial and is zoned C1-1VL (Limited Commercial – Height District 1VL). It is also designated as Commercial in the Granada Hills-Knollwood Community Plan.

The proposed project involves the proposed demolition of the existing uses at the site and the construction of three new buildings providing 440 residential units and approximately 64,650 square feet of commercial retail space. The retail uses would be located along the Woodley Avenue street frontage, with a proposed grocery store oriented along the San Fernando Mission Boulevard frontage. The proposed housing units would be located with two levels over the retail along Woodley Avenue, three levels over the grocery store, and four levels over a parking garage at the northwest corner of the site. One level of subterranean parking would also be provided throughout the majority of the site beneath the three new buildings. A total of 937 parking spaces would be provided with 585 of the spaces provided below ground for residents and 352 spaces provided in subterranean and surface spaces for commercial patrons.

The project would be constructed to meet the requirements in the City of Los Angeles Green Building Code and California Energy/Title 24 requirements. The project would include, at a minimum low-flow toilets, and other plumbing fixtures, and would incorporate a grey-water system for use in on-site irrigation. The project would also provide a total of 548 bicycle parking spaces for residents and commercial patrons.

Construction activities would occur over a period of approximately 28 months with an anticipated start in the second quarter of 2017. Excavation for the subterranean parking structure is expected to require the export of approximately 165,000 cubic yards of soil from the site.

#### THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G to the CEQA Guidelines, a project could have a potentially significant air quality impact if any of the following were to occur:

- (a) Conflict with or obstruct implementation of the applicable air quality plan;
- (b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- (c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- (d) Expose sensitive receptors to substantial pollutant concentrations; or
- (e) Create objectionable odors affecting a substantial number of people.

The City of Los Angeles is located within the South Coast Air Basin (Basin), which exceeds national and State ambient air quality standards for several air pollutants. The SCAQMD is the agency principally responsible for comprehensive air pollution control within the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all State and federal government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with plans and new development projects within its jurisdiction. Instead, the SCAQMD has used its expertise and prepared the CEQA Air Quality Handbook and newer thresholds of significance to indirectly address these issues in accordance with the projections and programs of the AQMPs. The purpose of the CEQA Air Quality Handbook and newer thresholds of significance is to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects and plans proposed in the Basin. Specifically, the CEQA Air Quality Handbook and newer thresholds of significance explain the procedures that the SCAQMD recommends be followed during environmental review processes required by CEQA. The CEQA Air Quality Handbook and newer thresholds of significance provide direction on

how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the region, and adverse impacts will be minimized.

In accordance with CEQA and the CEQA review process, the City of Los Angeles assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the county and region will meet federal and state standards. Instead, the City relies upon the expertise of the SCAQMD and utilizes the CEQA Air Quality Handbook and newer thresholds of significance as the guidance documents for the environmental review of plans and development proposals within its jurisdiction.

#### **PROJECT IMPACTS**

#### Consistency with the AQMP

**Threshold**: Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

**Impact**: Implementation of the proposed project would not conflict with or obstruct implementation of the 2012 AQMP. The impact of the proposed project would be less than significant.

#### **Impact Analysis**

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources to meet federal and State ambient air quality standards. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs). The most recent of these was adopted by the Governing Board of the SCAQMD on December 7, 2012 and supplemented in February 2015. This AQMP, referred to as the 2012 AQMP, was prepared to comply with the federal and State Clean Air Acts and amendments, to accommodate growth, to reduce the high levels of pollutants in the Basin, to meet federal and State air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. The 2012 AQMP identifies the control measures that will be implemented over a 20-year horizon to reduce major sources of pollutants. Implementation of control measures established in the previous AQMPs has substantially decreased the population's exposure to unhealthful levels of pollutants, even while substantial population growth has occurred within the Basin.

The future air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the SCAQMD assumes that general new development within the Basin will occur in accordance with

population growth and transportation projections identified by the Southern California Association of Governments (SCAG) in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted on April 4, 2012. The 2012 AQMP also assumes that general development projects will include strategies (mitigation measures) to reduce emissions generated during construction and operation in accordance with SCAQMD and local jurisdiction regulations which are designed to address air quality impacts and pollution control measures.

For general development projects, the SCAQMD recommends that consistency with the current AQMP be determined by demonstrating consistency with adopted local land use plan designations and/or population projections used in the development of the AQMP. Projects that are consistent with adopted local land use plan designations and/or applicable population projections would not interfere with air quality attainment because the growth of the project is included in the projections utilized in the formulation of the 2012 AQMP. As such, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds. However, changing a land use designation that would result in more intensive growth and/or exceeding the AQMP population projections could jeopardize attainment of the air quality conditions projected in the AQMP and is considered to be a significant impact.

It is assumed that the proposed project would comply with all SCAQMD rules and regulations that are in effect at the time of development and that are applicable to the project; the project applicant is not requesting any exemptions from the currently adopted or proposed rules.

The proposed residential and commercial uses are also allowed under the City of Los Angeles' existing land use designations for the project site. Therefore, the proposed project would not not exceed the growth projections of the AQMP, and, as such, would not conflict with the 2012 AQMP or jeopardize attainment of state and national ambient air quality standards in the area under the jurisdiction of the SCAQMD.

The proposed project would also be subject to the Los Angeles Green Building Code (Ordinance No. 182849), which adopted portions of the current California Green Building Standards (CALGreen) Code standards to reduce the use of natural resources, create healthier living environments, and minimize the negative impacts of development on local, regional and global ecosystems. Mandatory measures that would be applicable to the proposed project and that would help to reduce potential air pollutant emissions include the following:

#### Residential Uses

 99.04.106.4. Electric Vehicle (EV) charging for new construction. New construction shall comply with Section 99.04.106.4.1 and 99.04.106.4.2 to facilitate future installation of electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be installed in accordance with California Electrical Code, Article 625.

- 99.04.106.4.2. Multifamily Dwellings. At least five percent of the total parking spaces
  provided for all types of parking facilities, but in no case less than one location, shall be
  capable of supporting future EVSE.
- 99.04.106.5. Cool Roof for Reduction of Heat Island Effect.
  - 99.04.106.5.1. Solar Reflectance. Roofing material shall have a minimum 3-year aged solar reflectance equal to or greater than 0.63 for a roof slope ≤2:12 or 0.20 for a slop >2:12.
  - 99.04.106.5.2. Thermal Emittance. Roofing material shall have a Cool Roof Rating Council (CRRC) initial or aged thermal emittance equal to or greater than 0.75.
- 99.04.106.7. Reduction of Heat Island Effect for Nonroof Areas. Reduce non roof heat islands for 25 percent of pathways, patios, driveways, or other paced areas.
- 99.04.211.4. Solar Ready Buildings.
- 99.04.211.5. Space for Future Electrical Solar System Installation. With limited exceptions, buildings
  shall provide a minimum or 250 square feet of contiguous unobstructed roof area for the installation
  of future solar photovoltaic or other electrical solar panels.

#### Non-Residential Uses

- 99.05.106.5.3. Electric Vehicle (EV) Charging. Provide infrastructure to facilitate future installation of
  electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be
  installed in compliance with the California Building Code Section 406.9, the California Electrical Code
  Article 625, and as follows:
  - 99,05,106.5.3.1. Charging Locations. Parking facilities shall have five (5) percent of the total
    parking spaces, but not less than one (1), capable of supporting future EVSE charging
    locations.
- 99.05.211.1. Solar Ready Buildings. Comply with Section 110.10 of the California Energy Code.

Based on this information, the proposed project would be consistent with the AQMP and the City of Los Angeles' efforts to reduce regional air pollutant emissions. The impact of the proposed project would be less than significant.

# Violation of Air Quality Standards or Substantial Contribution to Air Quality Violations

**Threshold**: Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation.

**Impact**: The mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, construction and operation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The impact of the proposed project would be less than significant.

#### Impact Analysis

A project may have a significant impact if project-related emissions would exceed federal, State, or regional standards or thresholds, or if project-related emissions would substantially contribute to an existing or projected air quality violation. To address potential impacts from construction and operational activities, the SCAQMD currently recommends that impacts from projects with mass daily emissions that exceed any of the thresholds outlined in Table 1 be considered significant. The City of Los Angeles defers to these thresholds for the evaluation of construction-related and operational air quality impacts.

TABLE 1 - SCAQMD THRESHOLDS OF SIGNIFICANCE

| Pollutant   | Construction Thresholds (pounds/day) | Operational Thresholds<br>(pounds per day) |
|---|--------------------------------------|--|
| Volatile Organic Compounds (VOC)                  | 75                                   | 55   |
| Nitrogen Oxides (NOx)                             | 100                                  | 55   |
| Carbon Monoxide (CO)                              | 550                                  | 550  |
| Sulfur Oxides (SOx)                               | 150                                  | 150  |
| Respirable Particulate Matter (PM <sub>10</sub> ) | 150                                  | 150  |
| Fine Particulate Matter (PM <sub>2.5</sub> )      | 55                                   | 55   |

Source of table data: South Coast Air Quality Management District, Air Quality Significance Thresholds, website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

#### Mass Daily Regional Construction-Related Emissions

As discussed previously, construction of the proposed project is anticipated to begin in early 2017 and take place over a period of approximately 18 months. Demolition of the existing surface park lot would result in the export of approximately 5,450 cubic yards of debris from the site. As with all construction projects less than 50 acres in size, the proposed project would be subject to the best available control measures of Table 1 of SCAQMD Rule 403 for the control of fugitive dust throughout the construction phases of development.

The analysis of mass daily regional construction emissions has been prepared utilizing the California Emissions Estimator Model (CalEEMod v. 2013.2.2), as recommended by the SCAQMD, with the assumption that the project would comply with the fugitive dust control requirements of SCAQMD Rule 403. The mass daily construction-related emissions are shown in Table 2. These emissions assume a worst-case scenario in which the full set construction equipment would be used each day throughout the entire construction phase. In reality, each piece of equipment would only be used for a portion of each day and there would be days when very little equipment is used. As shown in Table 2, the mass daily regional construction-related emissions generated during the project construction phase would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, this impact of the project would be less than significant.

TABLE 2 - ESTIMATED MASS DAILY REGIONAL CONSTRUCTION EMISSIONS

| Year of Construction              | Emissions in Pounds Per Day |       |       |       |                  |                   |  |
|-----------------------------------|-----------------------------|-------|-------|-------|------------------|-------------------|--|
|                                   | VOC                         | NOx   | СО    | SOx   | PM <sub>10</sub> | PM <sub>2.5</sub> |  |
| 2017                              | 7.7                         | 96.7  | 72.4  | 0.2   | 7.7              | 4.3               |  |
| 2018                              | 5.5                         | 35.5  | 59.9  | 0.1   | 8.5              | 3.4               |  |
| 2019                              | 28.4                        | 40.0  | 69.5  | 0.2   | 9.9              | 4.0               |  |
| SCAQMD Thresholds of Significance | 75.0                        | 100.0 | 550.0 | 150.0 | 150.0            | 55.0              |  |
| Significant Impact?               | No                          | No    | No    | No    | No               | No                |  |

Construction emission calculations based on the construction phasing discussed previously in this report.

Calculated  $PM_{10}$  and  $PM_{2.5}$  emissions assume compliance with SCAQMD Rule 403 for fugitive dust. Fugitive dust control is required under Rule 403 and is not typical mitigation to reduce an otherwise significant environmental impact of this project. The emissions shown in this table are the mitigated overall construction emissions totals shown on page 5 of the CalEEMod results sheets. Dust control in CalEEMod is only allowed to be entered as mitigation even though it is required under Rule 403. No project-specific mitigation measures are identified for this project.

CalEEMod result sheets are provided in Appendix A.

#### **Mass Daily Regional Operational Emissions**

Operational emissions generated by area sources, energy sources, and mobile sources would result from the increased amount of normal day-to-day activities at the project site after occupation. Area source emissions are generated by the the operation of landscape maintenance equipment and the use of consumer products. Energy Sources are generated by the consumption of natural gas for heating and cooking.

The average daily operational emissions generated by the proposed project and the existing uses at the project site have been calculated using CalEEMod. The results of these calculations are presented in Table 3. As shown, the total net increase in operational emissions generated by the proposed project would not approach the operational thresholds of significance set by the SCAQMD. Therefore, impacts associated with regional operational emissions from the proposed project would be less than significant.

TABLE 3 - ESTIMATED MASS DAILY OPERATIONAL EMISSIONS

| F                                 | Emissions in Pounds Per Day |      |       |       |                  |                   |  |
|-----------------------------------|-----------------------------|------|-------|-------|------------------|-------------------|--|
| Emissions Source                  | VOC                         | NOx  | СО    | SOx   | PM <sub>10</sub> | PM <sub>2.5</sub> |  |
| Proposed Project                  |                             |      |       |       |                  |                   |  |
| Area Sources                      | 19.9                        | 0.4  | 36.5  | <0.1  | 0.2              | 0.2               |  |
| Energy Sources                    | 0.1                         | 1.0  | 0.5   | <0.1  | 0.1              | 0.1               |  |
| Mobile Sources                    | 30.0                        | 63.8 | 274.6 | 0.8   | 49.6             | 13.9              |  |
| Total Emissions                   | 50.0                        | 65.2 | 311.6 | 0.8   | 49.9             | 14.2              |  |
| Existing Site Uses                |                             |      |       |       |                  |                   |  |
| Area Sources                      | 6.8                         | <0.1 | <0.1  | <0.1  | <0.1             | <0.1              |  |
| Energy Sources                    | 0.1                         | 1.0  | 0.8   | <0.1  | 0.1              | 0.1               |  |
| Mobile Sources                    | 31.2                        | 71.3 | 304.7 | 0.6   | 42.9             | 12.1              |  |
| Total Emissions                   | 38.3                        | 72.3 | 305.5 | 0.7   | 42.9             | 12.2              |  |
| Total Net Change                  | 11.7                        | -7.1 | 6.1   | 0.1   | 7.0              | 2.0               |  |
| SCAQMD Thresholds of Significance | 55.0                        | 55.0 | 550.0 | 150.0 | 150.0            | 55.0              |  |
| Significant Impact?               | No                          | No   | No    | No    | No               | No                |  |

The emissions shown in this table are the unmitigated overall operational emissions totals shown on page 7 of the CalEEMod results sheets for the proposed project (Appendix A) and page 5 of the CalEEMod results sheets for the existing uses at the project site (Appendix B).

CalEEMod result sheets are provided in Appendix A and Appendix B.

#### **Cumulatively Considerable Net Increase of Criteria Pollutants**

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

**Impact**: The mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, the proposed project would not generate a cumulatively considerable net increase of criteria pollutants. This would be a less than significant cumulative impact.

#### **Impact Analysis**

Because the South Coast Air Basin is currently in nonattainment for ozone, nitrogen dioxide (NO<sub>2</sub>), PM<sub>10</sub> and PM<sub>2.5</sub>, related projects may likely exceed an air quality standard or contribute to an existing or projected air quality exceedance. With respect to determining the significance of the proposed project

contribution, the SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less than significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed any of the thresholds of significance recommended by the SCAQMD. Also, as discussed below, daily localized emissions generated by the proposed project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs). Therefore, the proposed project would not contribute a cumulatively considerable increase in emissions for the pollutants for which the Basin is in nonattainment. The cumulative air quality impacts associated with the proposed project would be less than significant.

#### **Exposure of Sensitive Receptors to Substantial Pollutant Concentrations**

Threshold: Would the proposed project expose sensitive receptors to substantial pollutant concentrations.

**Impact**: Emissions generated by the proposed project would not expose receptors in the vicinity of the project site to substantial pollutant concentrations. The impact of the project would be less than significant.

#### Analysis

A significant impact may occur if a project were to generate pollutant concentrations to a degree that would significantly affect sensitive receptors. Land uses that are considered more sensitive to changes in air quality than others are referred to as sensitive receptors. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

The nearest sensitive receptors to the proposed project site are the residential properties located to the east, south, and west. John F. Kennedy High School is located to the immediate north of the project site, although the nearest classrooms are located approximately 200 feet from the project site.

The localized emissions of concern are NOx, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD has developed localized significance threshold (LST) look-up tables for project sites that are one, two, and five acres in size to simplify the evaluation of localized emissions at small sites. LSTs are provided for each Source Receptor Area (SRA) of the Basin and various distances from the source of emissions, and these LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards in the affected area. In the case of this analysis, the proposed project site is located within SRA 6 (West San Fernando Valley) and the nearest sensitive use is adjacent to the site. Therefore, the LSTs for a five-acre acre site and receptors located within 25 meters are used to address the potential localized NOx, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> impacts to the area surrounding the proposed project site.

#### **Localized Construction Emissions**

Table 4 identifies the maximum daily emissions that are estimated to occur at the project site during the construction phases of the proposed project. As shown, emissions during the construction phases would not exceed the SCAQMD's LSTs for the specified pollutants. Therefore, impacts related to localized pollutant concentrations during construction would be less than significant.

#### **Localized Operational Emissions**

The average daily localized operational emissions that would be generated at the proposed project site are shown in Table 5 along with the applicable operational LSTs for SRA 6. As shown on-site operational emissions generated by the new residential and commercial uses would not approach the established SCAQMD localized thresholds. Therefore, this impact would be less than significant.

In addition to the emissions generated at the project site, localized emissions would also be generated by vehicles traveling through nearby intersections. Traffic-congested roadways and intersections (Level of Service [LOS] D or worse) have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed national and/or state standards for CO are termed CO "hotspots." The SCAQMD considers CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots.

The SCAQMD has recommended that a CO hotspot analysis should be conducted for intersections where the proposed project would have a significant traffic-related congestion impact causing the LOS to change to E or F or when a project increases the volume to capacity ratio (V/C) increases by 2% and the LOS is D or worse. It should be noted that these recommendations were formulated several years ago when the Basin was a nonattainment area for federal and state CO standards. The South Coast Air Basin is now in attainment of all applicable ambient CO standards and the maximum 1-hour concentration of 3.0 parts per million (ppm) and the maximum 8-hour concentration of 3.0 ppm measured within SRA 6 in 2014 (the most recent data available) are well below the 35.0 ppm federal and 20.0 ppm state 1-hour standards as well as the 9.0 federal and state 8-hour standard.

TABLE 4 - ESTIMATED DAILY LOCALIZED CONSTRUCTION EMISSIONS

|   | F                  | Emissions in Pounds Per Day |                  |                   |  |  |  |  |
|---|--------------------|-----------------------------|------------------|-------------------|--|--|--|--|
| Construction Phase                                      | NOx                | СО                          | PM <sub>10</sub> | PM <sub>2.5</sub> |  |  |  |  |
| Building Demolition and Parking Lot Removal             |                    |                             |                  |                   |  |  |  |  |
| On-site Emissions                                       | 34.7               | 27.1                        | 2.6              | 1.7               |  |  |  |  |
| SCAQMD Localized Thresholds                             | 221.0              | 1,158.0                     | 11.0             | 6.0               |  |  |  |  |
| Significant Impact?                                     | No                 | No                          | No               | No                |  |  |  |  |
| Site Excavation and Grading                             |                    |                             |                  |                   |  |  |  |  |
| On-site Emissions                                       | 44.0               | 32.2                        | 3.1              | 2.6               |  |  |  |  |
| SCAQMD Localized Thresholds                             | 221.0              | 1,158.0                     | 11.0             | 6.0               |  |  |  |  |
| Significant Impact?                                     | No                 | No                          | No               | No                |  |  |  |  |
| Parking Struc   | cture Construction | and Lot Paving              | ,                | •                 |  |  |  |  |
| On-site Emissions                                       | 23.5               | 13.4                        | 1.2              | 1.1               |  |  |  |  |
| SCAQMD Localized Thresholds                             | 221.0              | 1,158.0                     | 11.0             | 6.0               |  |  |  |  |
| Significant Impact?                                     | No                 | No                          | No               | No                |  |  |  |  |
| Building Construction and Architectural Coatings (2019) |                    |                             |                  |                   |  |  |  |  |
| On-site Emissions                                       | 28.3               | 24.5                        | 1.8              | 1.7               |  |  |  |  |
| SCAQMD Localized Thresholds                             | 221.0              | 1,158.0                     | 11.0             | 6.0               |  |  |  |  |
| Significant Impact?                                     | No                 | No                          | No               | No                |  |  |  |  |

Localized thresholds for construction emissions for a five-acre site at a receptor distance of 25 meters, as established by the SCAQMD for sites in SRA 6.

Calculated  $PM_{10}$  and  $PM_{2.5}$  emissions assume compliance with SCAQMD Rule 403 for fugitive dust. Fugitive dust control is required under Rule 403 and is not typical mitigation to reduce an otherwise significant environmental impact of this project. The emissions shown in this table for the building demolition and site excavation and grading phases are the mitigated construction on-site emissions totals shown on pages 11 and 13 of the CalEEMod results sheets. Dust control in CalEEMod is only allowed to be entered as mitigation even though it is required under Rule 403. No project-specific mitigation measures are identified for this project.

The on-site emissions for the parking structure construction and lot paving are the unmitigated on-site emissions from page 14 of the CalEEMod results sheets.

The on-site emissions for building construction and architectural coatings are the combined unmitigated on-site emissions from pages 20 and 22 of the CalEEMod results sheets.

CalEEMod result sheets are provided in Appendix A.

According to the Technical Traffic Evaluation prepared for the proposed project, the proposed project would generate approximately 6,246 vehicle trips per day with 328 trips occurring during the AM peak traffic hour and 577 trips during the PM peak traffic hour.<sup>1</sup> These numbers are less than the 8,249 daily

<sup>&</sup>lt;sup>1</sup> Overland Traffic Consultants, 2016.

trips, 377 AM peak hour trips, and 783 PM peak hour trips generated by the existing uses at the site.<sup>2</sup> However, there would be slight changes in the access patterns of vehicles entering and existing the site.

TABLE 5 - ESTIMATED DAILY LOCALIZED OPERATIONAL EMISSIONS

| Emissions Source                  | Emissions in Pounds per Day |         |                  |                   |  |  |
|-----------------------------------|-----------------------------|---------|------------------|-------------------|--|--|
|                                   | NOx                         | СО      | PM <sub>10</sub> | PM <sub>2.5</sub> |  |  |
| Area Sources                      | 0.4                         | 36.5    | 0.2              | 0.2               |  |  |
| Energy Sources                    | 1.1                         | 0.6     | 0.1              | 0.1               |  |  |
| Mobile Sources                    | 0.6                         | 2.7     | 0.5              | 0.1               |  |  |
| Total Emissions                   | 2.1                         | 39.8    | 0.8              | 0.4               |  |  |
| SCAQMD Thresholds of Significance | 221.0                       | 1,158.0 | 3.0              | 2.0               |  |  |
| Significant Impact?               | No                          | No      | No               | No                |  |  |

Localized thresholds for operational emissions for a five-acre site at a receptor distance of 25 meters, as established by the SCAQMD for sites in SRA 6.

The emissions shown in this table are the unmitigated operational area and energy emissions totals shown on page 7 of the CalEEMod results sheets.

Per LST methodology, only on-site mobile source emissions need be included. It is estimated that approximately 1.0 percent of the unmitigated mobile source emissions from page 7 of the CalEEMod results sheets would occur within the project site.

CalEEMod result sheets are provided in Appendix A.

The Technical Traffic Evaluation concludes that the traffic generated by the proposed project would not cause a significant impact at any of the intersections in the vicinity of the project site and that the intersection of San Fernando Mission Boulevard and Woodley Avenue would continue to operate at LOS A. As such, the change in traffic associated with the project would not be capable of increasing localized CO concentrations at intersections to levels that exceed federal and/or state standards. The impact of the proposed project would be less than significant.

#### **Odors**

**Threshold**: Would the proposed project create objectionable odors affecting a substantial number of people.

**Impact**: Implementation of the proposed project would not create objectionable odors affecting a substantial number of people. The impact of the project would be less than significant.

<sup>&</sup>lt;sup>2</sup> Overland Traffic Consultants, 2016.

#### Impact Analysis

A project-related significant adverse effect could occur if construction or operation of the proposed project would result in generation of odors that would be perceptible in adjacent sensitive areas.

Operational odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. The proposed project involves the construction and operation of new residential units and commercial uses, which are not typically associated with odor complaints. As the proposed project involves no elements related to industrial projects, no objectionable odors are anticipated. Therefore, the potential operational impacts associated with objectionable odors would be less than significant.

#### **CUMULATIVE IMPACTS**

Because the South Coast Air Basin is currently in nonattainment for ozone, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, other new projects in the local vicinity could exceed an air quality standard or contribute to an existing or projected air quality exceedance. With regard to determining the significance of the proposed project contribution, the SCAQMD considers any construction-related and/or operational emissions from individual projects that exceed the project-specific thresholds of significance identified above to be considered cumulatively considerable. As discussed above, the mass daily regional emissions generated by project construction-related activities and the total net increase in mass daily regional emissions generated by operational activities would not exceed the thresholds of significance recommended by the SCAQMD. Therefore, the proposed project would not contribute a cumulatively considerable increase in emissions for the pollutants for which the Basin is in nonattainment. The cumulative air quality impacts associated with the proposed project would be less than significant.

#### **REFERENCES**

California Natural Resources Agency. 2016. 2016 California Environmental Quality Act (CEQA) Statute and Guidelines. Association of Environmental Professionals.

Los Angeles, City of. December 2013. Ordinance No. 182849: Los Angeles Green Building Code.

Overland Traffic Consultants, Inc. July 19, 2016. Technical Traffic Evaluation for the Proposed Mixed-Use Project at 11147 Woodley Avenue & 16201-16301 San Fernando Missions Boulevard.

South Coast Air Quality Management District. 1993. CEQA Air Quality Handbook.

South Coast Air Quality Management District. July 2008. Final Localized Significance Threshold Methodology.

| South Coast Air Quality Management District. March 2015. SCAQMD Air Quality Significance Thresholds. |
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# APPENDIX A PROPOSED PROJECT EMISSIONS CALCULATION DATA

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#### **Woodley & SF Mission - Proposed Project**

#### Los Angeles-South Coast County, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

(lb/MWhr)

| Land Uses                      | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|--------------------------------|--------|---------------|-------------|--------------------|------------|
| Enclosed Parking with Elevator | 826.00 | Space         | 0.00        | 330,400.00         | 0          |
| Parking Lot                    | 111.00 | Space         | 2.45        | 44,400.00          | 0          |
| Apartments Mid Rise            | 440.00 | Dwelling Unit | 5.50        | 440,000.00         | 1258       |
| Regional Shopping Center       | 16.25  | 1000sqft      | 0.00        | 16,245.00          | 0          |
| Supermarket                    | 46.80  | 1000sqft      | 0.00        | 46,800.00          | 0          |

(lb/MWhr)

#### 1.2 Other Project Characteristics

| Urbanization    | Urban                 | Wind Speed (m/s)    | 2.2   | Precipitation Freq (Days) | 33    |
|-----------------|-----------------------|---------------------|-------|---------------------------|-------|
| Climate Zone    | 12                    |                     |       | Operational Year          | 2020  |
| Utility Company | Los Angeles Departmer | nt of Water & Power |       |                           |       |
| CO2 Intensity   | 1227.89               | CH4 Intensity       | 0.029 | N2O Intensity             | 0.006 |

(lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Default lot acreage numbers revised to reflect proposed site plan.

Construction Phase - Default construction schedule revised to relect anticipated construction schedule.

Off-road Equipment - Three air compressors added to the default mix of architectural coating phase equipment.

Off-road Equipment -

Off-road Equipment - Two excavators added to the default list of grading phase equipment.

Off-road Equipment - Two cranes, two cement and mortar mixers, and one welder added to the default list of paving phase equipment.

Demolition -

Grading - Assumes grading of the entire 7.95-acre project site.

Architectural Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Vehicle Trips - Default trip rates for non-residential uses have been revised to be consistent with the Technical Traffic Evaluation prepared for the proposed project including the 5% reduction for internal trips.

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Woodstoves - Assumes no fireplaces.

Area Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Water And Wastewater - Assumes a limited amount of water use for outdoor landscaping (default for supermarket).

Sequestration - Assumes a minimum of 287 new trees planted per current project site plans.

Construction Off-road Equipment Mitigation - Assumes required compliance with SCAQMD Rule 403 for fugitive dust.

Energy Mitigation - Assumes a minimum building energy efficiency of 15% per CalGreen Code.

Water Mitigation - Assumes use of grey water for landscape irrigation and indoor water use reduction per CalGreen Code.

Waste Mitigation - Assumes a minimum 50% solid waste reduction per current city requirements.

Off-road Equipment - Deleted two excavators from default list of equipment for demolition since only one is expected to be used at the site.

| Table Name              | Column Name                     | Default Value | New Value |
|-------------------------|---------------------------------|---------------|-----------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior      | 250.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior      | 250.00        | 50.00     |
| tblArchitecturalCoating | EF_Residential_Exterior         | 100.00        | 50.00     |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 250           | 50        |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 250           | 50        |
| tblAreaCoating          | Area_EF_Residential_Exterior    | 100           | 50        |

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| tblAreaMitigation    | UseLowVOCPaintNonresidentialExteriorV<br>alue | 50        | 250        |
|----------------------|---|-----------|------------|
| tblConstructionPhase | NumDays                                       | 20.00     | 227.00     |
| tblConstructionPhase | NumDays                                       | 230.00    | 437.00     |
| tblConstructionPhase | NumDays                                       | 20.00     | 35.00      |
| tblConstructionPhase | NumDays                                       | 20.00     | 101.00     |
| tblConstructionPhase | NumDays                                       | 20.00     | 155.00     |
| tblConstructionPhase | NumDaysWeek                                   | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                   | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                   | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                   | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                   | 5.00      | 6.00       |
| tblConstructionPhase | PhaseEndDate                                  | 4/23/2020 | 9/27/2019  |
| tblConstructionPhase | PhaseEndDate                                  | 8/1/2019  | 8/2/2019   |
| tblConstructionPhase | PhaseEndDate                                  | 9/7/2017  | 9/8/2017   |
| tblConstructionPhase | PhaseEndDate                                  | 3/8/2018  | 3/9/2018   |
| tblConstructionPhase | PhaseStartDate                                | 8/3/2019  | 1/7/2019   |
| tblConstructionPhase | PhaseStartDate                                | 3/10/2018 | 3/12/2018  |
| tblConstructionPhase | PhaseStartDate                                | 5/13/2017 | 5/15/2017  |
| tblConstructionPhase | PhaseStartDate                                | 9/9/2017  | 9/11/2017  |
| tblFireplaces        | NumberGas                                     | 374.00    | 0.00       |
| tblFireplaces        | NumberNoFireplace                             | 44.00     | 440.00     |
| tblFireplaces        | NumberWood                                    | 22.00     | 0.00       |
| tblGrading           | AcresOfGrading                                | 12.50     | 7.95       |
| tblGrading           | MaterialExported                              | 0.00      | 165,000.00 |
| tblLandUse           | LandUseSquareFeet                             | 16,250.00 | 16,245.00  |
| tblLandUse           | LotAcreage                                    | 7.43      | 0.00       |
| tblLandUse           | LotAcreage                                    | 1.00      | 2.45       |
| tblLandUse           | LotAcreage                                    | 11.58     | 5.50       |

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| tblLandUse                | LotAcreage                 | 0.37          | 0.00                                    |
|---------------------------|----------------------------|---------------|---|
| tblLandUse                | LotAcreage                 | 1.07          | 0.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00          | 4.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00          | 3.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 2.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 2.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 1.00                                    |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblProjectCharacteristics | OperationalYear            | 2014          | 2020                                    |
| tblSequestration          | NumberOfNewTrees           | 0.00          | 287.00                                  |
| tblVehicleTrips           | ST_TR                      | 49.97         | 47.47                                   |
| tblVehicleTrips           | ST_TR                      | 177.59        | 168.71                                  |
| tblVehicleTrips           | SU_TR                      | 25.24         | 23.98                                   |
| tblVehicleTrips           | SU_TR                      | 166.44        | 158.12                                  |
| tblVehicleTrips           | WD_TR                      | 42.94         | 40.57                                   |
| tblVehicleTrips           | WD_TR                      | 102.24        | 97.13                                   |
| tblWater                  | OutdoorWaterUseRate        | 18,073,160.15 | 0.00                                    |
| tblWater                  | OutdoorWaterUseRate        | 737,738.42    | 0.00                                    |
| tblWoodstoves             | NumberCatalytic            | 22.00         | 0.00                                    |
| tblWoodstoves             | NumberNoncatalytic         | 22.00         | 0.00                                    |
|                           |                            |               |   |

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#### 2.0 Emissions Summary

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Unmitigated Construction**

|       | ROG     | NOx      | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------|---------|----------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year  |         |          |          |        | lb/d             | day             |               |                   |                  | lb/d           | lay      |                 |                 |        |        |                 |
| 2017  | 7.6612  | 96.6951  | 72.4044  | 0.1956 | 5.5392           | 3.2104          | 8.7497        | 1.8896            | 2.9535           | 4.8431         | 0.0000   | 19,483.62<br>50 | 19,483.62<br>50 | 1.3881 | 0.0000 | 19,512.77<br>44 |
| 2018  | 5.5437  | 35.4547  | 59.9282  | 0.1330 | 6.7540           | 1.6990          | 8.4530        | 1.8073            | 1.5933           | 3.4006         | 0.0000   | 11,485.09<br>69 | 11,485.09<br>69 | 0.9638 | 0.0000 | 11,505.33<br>65 |
| 2019  | 28.3632 | 39.9900  | 69.5272  | 0.1598 | 7.9390           | 2.0061          | 9.9451        | 2.1216            | 1.9132           | 4.0348         | 0.0000   | 13,447.69<br>17 | 13,447.69<br>17 | 1.0847 | 0.0000 | 13,470.46<br>93 |
| Total | 41.5681 | 172.1398 | 201.8598 | 0.4883 | 20.2323          | 6.9154          | 27.1478       | 5.8184            | 6.4601           | 12.2785        | 0.0000   | 44,416.41<br>36 | 44,416.41<br>36 | 3.4365 | 0.0000 | 44,488.58<br>02 |

#### **Mitigated Construction**

|       | ROG     | NOx      | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|-------|---------|----------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year  |         |          |          |        | lb/d             | day             |               |                   |                  |                |          |                 | lb/d            | lay    |        |                 |
| 2017  | 7.6612  | 96.6951  | 72.4044  | 0.1956 | 4.4664           | 3.2104          | 7.6768        | 1.3672            | 2.9535           | 4.3207         | 0.0000   | 19,483.62<br>50 | 19,483.62<br>50 | 1.3881 | 0.0000 | 19,512.77<br>44 |
| 2018  | 5.5437  | 35.4547  | 59.9282  | 0.1330 | 6.7540           | 1.6990          | 8.4530        | 1.8073            | 1.5933           | 3.4006         | 0.0000   | 11,485.09<br>69 | 11,485.09<br>69 | 0.9638 | 0.0000 | 11,505.33<br>65 |
| 2019  | 28.3632 | 39.9900  | 69.5272  | 0.1598 | 7.9390           | 2.0061          | 9.9451        | 2.1216            | 1.9132           | 4.0348         | 0.0000   | 13,447.69<br>17 | 13,447.69<br>17 | 1.0847 | 0.0000 | 13,470.46<br>93 |
| Total | 41.5681 | 172.1398 | 201.8598 | 0.4883 | 19.1594          | 6.9154          | 26.0749       | 5.2960            | 6.4601           | 11.7561        | 0.0000   | 44,416.41<br>36 | 44,416.41<br>36 | 3.4365 | 0.0000 | 44,488.58<br>02 |

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|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 5.30             | 0.00            | 3.95          | 8.98              | 0.00             | 4.25           | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

#### 2.2 Overall Operational

#### **Unmitigated Operational**

|          | ROG     | NOx     | СО       | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |                 | lb/d             | lb/day          |               |                   |                  |                |          |                 |                 |        |        |                 |
| Area     | 19.8635 | 0.4222  | 36.5240  | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                   | 0.2006           | 0.2006         | 0.0000   | 65.5819         | 65.5819         | 0.0643 | 0.0000 | 66.9327         |
| Energy   | 0.1255  | 1.0897  | 0.5845   | 6.8400e-<br>003 |                  | 0.0867          | 0.0867        |                   | 0.0867           | 0.0867         |          | 1,368.763<br>7  | 1,368.763<br>7  | 0.0262 | 0.0251 | 1,377.093<br>7  |
| Mobile   | 29.9875 | 63.7828 | 274.5773 | 0.7546          | 48.5457          | 1.0337          | 49.5794       | 12.9827           | 0.9535           | 13.9362        |          | 58,524.88<br>78 | 58,524.88<br>78 | 2.1777 |        | 58,570.61<br>86 |
| Total    | 49.9765 | 65.2946 | 311.6857 | 0.7634          | 48.5457          | 1.3211          | 49.8667       | 12.9827           | 1.2408           | 14.2235        | 0.0000   | 59,959.23<br>34 | 59,959.23<br>34 | 2.2682 | 0.0251 | 60,014.64<br>50 |

#### **Mitigated Operational**

|          | ROG     | NOx     | СО       | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O    | CO2e            |
|----------|---------|---------|----------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Category |         |         |          |                 | lb/d             |                 |               | lb/d              | lay              |                |          |                 |                 |        |        |                 |
| Area     | 19.8635 | 0.4222  | 36.5240  | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                   | 0.2006           | 0.2006         | 0.0000   | 65.5819         | 65.5819         | 0.0643 | 0.0000 | 66.9327         |
| Energy   | 0.1125  | 0.9773  | 0.5282   | 6.1300e-<br>003 |                  | 0.0777          | 0.0777        |                   | 0.0777           | 0.0777         |          | 1,226.885<br>3  | 1,226.885<br>3  | 0.0235 | 0.0225 | 1,234.351<br>9  |
| Mobile   | 29.9875 | 63.7828 | 274.5773 | 0.7546          | 48.5457          | 1.0337          | 49.5794       | 12.9827           | 0.9535           | 13.9362        |          | 58,524.88<br>78 | 58,524.88<br>78 | 2.1777 |        | 58,570.61<br>86 |
| Total    | 49.9635 | 65.1823 | 311.6295 | 0.7627          | 48.5457          | 1.3121          | 49.8577       | 12.9827           | 1.2318           | 14.2145        | 0.0000   | 59,817.35<br>50 | 59,817.35<br>50 | 2.2655 | 0.0225 | 59,871.90<br>32 |

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|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20   | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|-------|------|
| Percent<br>Reduction | 0.03 | 0.17 | 0.02 | 0.09 | 0.00             | 0.68            | 0.02          | 0.00              | 0.72             | 0.06           | 0.00     | 0.24     | 0.24      | 0.12 | 10.36 | 0.24 |

#### 3.0 Construction Detail

#### **Construction Phase**

| Phase<br>Number | Phase Name                              | Phase Type            | Start Date | End Date  | Num Days<br>Week | Num Days | Phase Description |  |
|-----------------|---|-----------------------|------------|-----------|------------------|----------|-------------------|--|
| 1               | Demolition                              | Demolition            | 4/3/2017   | 5/12/2017 | 6                | 35       |                   |  |
| 2               | Grading & Excavation                    | Grading               | 5/15/2017  | 9/8/2017  | 6                | 101      |                   |  |
|                 | Parking Structure Construction & Paving | Paving                | 9/11/2017  | 3/9/2018  | 6                | 155      |                   |  |
| 4               | Building Construction                   | Building Construction | 3/12/2018  | 8/2/2019  | 6                | 437      |                   |  |
| 5               | Architectural Coating                   | Architectural Coating | 1/7/2019   | 9/27/2019 | 6                | 227      |                   |  |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 891,000; Residential Outdoor: 297,000; Non-Residential Indoor: 719,579; Non-Residential Outdoor: 239,860 (Architectural

Coating - sqft)

OffRoad Equipment

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| Phase Name                              | Offroad Equipment Type    | Amount      | Usage Hours | Horse Power | Load Factor |  |
|---|---------------------------|-------------|-------------|-------------|-------------|--|
| Demolition                              | Concrete/Industrial Saws  | 1           | 8.00        | 81          | 0.73        |  |
| Demolition                              | Excavators                | - <b> </b>  | 8.00        | 162         | 0.38        |  |
| Demolition                              | Rubber Tired Dozers       | 2           | 8.00        | 255         | 0.40        |  |
| Grading & Excavation                    | Excavators                | 3           | 8.00        | 162         | 0.38        |  |
| Grading & Excavation                    | Graders                   | 1           | 8.00        | 174         | 0.41        |  |
| Grading & Excavation                    | Rubber Tired Dozers       | - <b> </b>  | 8.00        | 255         | 0.40        |  |
| Grading & Excavation                    | Tractors/Loaders/Backhoes | 3           | 8.00        | 97          | 0.37        |  |
| Parking Structure Construction & Paving | Cement and Mortar Mixers  | 2           | 6.00        | 9           | 0.56        |  |
| Parking Structure Construction & Paving | Cranes                    | 2           | 6.00        | 226         | 0.29        |  |
| Parking Structure Construction & Paving | Pavers                    | 1           | 8.00        | 125         | 0.42        |  |
| Parking Structure Construction & Paving | Paving Equipment          | 1           | 8.00        | 130         | 0.36        |  |
| Parking Structure Construction & Paving | Rollers                   | 1           | 8.00        | 80          | 0.38        |  |
| Parking Structure Construction & Paving | Welders                   | 1           | 6.00        | 46          | 0.45        |  |
| Building Construction                   | Cranes                    | 1           | 7.00        | 226         | 0.29        |  |
| Building Construction                   | Forklifts                 | 3           | 8.00        | 89          | 0.20        |  |
| Building Construction                   | Generator Sets            | 1           | 8.00        | 84          | 0.74        |  |
| Building Construction                   | Tractors/Loaders/Backhoes | 3           | 7.00        | 97          | 0.37        |  |
| Building Construction                   | Welders                   | 1           | 8.00        | 46          | 0.45        |  |
| Architectural Coating                   | Air Compressors           | <u>+</u> 4: | 6.00        | 78          | 0.48        |  |

#### **Trips and VMT**

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 343.00                 | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading & Excavation  | 8                          | 20.00                 | 0.00                  | 20,625.00              | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Parking Structure     | 8                          | 20.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 530.00                | 133.00                | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 4                          | 106.00                | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 **Demolition - 2017**

**Unmitigated Construction On-Site** 

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category      | lb/day |         |         |        |                  |                 |               |                   | lb/day           |                |          |                |                |        |     |                |
| Fugitive Dust |        |         |         |        | 2.1203           | 0.0000          | 2.1203        | 0.3210            | 0.0000           | 0.3210         |          | 1              | 0.0000         |        |     | 0.0000         |
| Off-Road      | 3.3238 | 34.6634 | 27.0513 | 0.0293 |                  | 1.7299          | 1.7299        |                   | 1.6161           | 1.6161         |          | 2,953.943<br>8 | 2,953.943<br>8 | 0.7756 |     | 2,970.232<br>2 |
| Total         | 3.3238 | 34.6634 | 27.0513 | 0.0293 | 2.1203           | 1.7299          | 3.8503        | 0.3210            | 1.6161           | 1.9371         |          | 2,953.943<br>8 | 2,953.943<br>8 | 0.7756 |     | 2,970.232<br>2 |

3.2 Demolition - 2017

# **Unmitigated Construction Off-Site**

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/d      | lay             |     |          |
| Hauling  | 0.1632 | 2.5232 | 1.8680 | 7.3100e-<br>003 | 0.1707           | 0.0372          | 0.2079        | 0.0467            | 0.0342           | 0.0809         |          | 725.6532  | 725.6532  | 5.3500e-<br>003 |     | 725.7655 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000          |     | 0.0000   |
| Worker   | 0.0600 | 0.0761 | 0.9428 | 2.1800e-<br>003 | 0.1677           | 1.5200e-<br>003 | 0.1692        | 0.0445            | 1.4000e-<br>003  | 0.0459         |          | 177.4541  | 177.4541  | 9.2800e-<br>003 |     | 177.6489 |
| Total    | 0.2233 | 2.5993 | 2.8108 | 9.4900e-<br>003 | 0.3384           | 0.0387          | 0.3770        | 0.0912            | 0.0356           | 0.1268         |          | 903.1073  | 903.1073  | 0.0146          |     | 903.4144 |

# **Mitigated Construction On-Site**

|               | ROG    | NOx     | CO          | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------------|--------|---------|-------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category      |        |         |             |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | day    |        |                |
| Fugitive Dust |        |         | 1<br>1<br>1 |        | 0.8269           | 0.0000          | 0.8269        | 0.1252            | 0.0000           | 0.1252         |          | i<br>i         | 0.0000         |        | i<br>i | 0.0000         |
| Off-Road      | 3.3238 | 34.6634 | 27.0513     | 0.0293 |                  | 1.7299          | 1.7299        |                   | 1.6161           | 1.6161         | 0.0000   | 2,953.943<br>8 | 2,953.943<br>8 | 0.7756 |        | 2,970.232<br>2 |
| Total         | 3.3238 | 34.6634 | 27.0513     | 0.0293 | 0.8269           | 1.7299          | 2.5569        | 0.1252            | 1.6161           | 1.7413         | 0.0000   | 2,953.943<br>8 | 2,953.943<br>8 | 0.7756 |        | 2,970.232<br>2 |

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3.2 **Demolition - 2017** 

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----|----------|
| Category |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/d      | day             |     |          |
| Hauling  | 0.1632 | 2.5232 | 1.8680 | 7.3100e-<br>003 | 0.1707           | 0.0372          | 0.2079        | 0.0467            | 0.0342           | 0.0809         |          | 725.6532  | 725.6532  | 5.3500e-<br>003 |     | 725.7655 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000          |     | 0.0000   |
| Worker   | 0.0600 | 0.0761 | 0.9428 | 2.1800e-<br>003 | 0.1677           | 1.5200e-<br>003 | 0.1692        | 0.0445            | 1.4000e-<br>003  | 0.0459         |          | 177.4541  | 177.4541  | 9.2800e-<br>003 |     | 177.6489 |
| Total    | 0.2233 | 2.5993 | 2.8108 | 9.4900e-<br>003 | 0.3384           | 0.0387          | 0.3770        | 0.0912            | 0.0356           | 0.1268         |          | 903.1073  | 903.1073  | 0.0146          |     | 903.4144 |

# 3.3 Grading & Excavation - 2017

# **Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O              | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|------------------|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | lay    |                  |                |
| Fugitive Dust |        |         |         |        | 1.7588           | 0.0000          | 1.7588        | 0.8564            | 0.0000           | 0.8564         |          |                | 0.0000         |        |                  | 0.0000         |
| Off-Road      | 4.1800 | 44.0162 | 32.2233 | 0.0403 |                  | 2.4341          | 2.4341        |                   | 2.2393           | 2.2393         |          | 4,126.190<br>2 | 4,126.190<br>2 | 1.2643 | 1<br>1<br>1<br>1 | 4,152.739<br>6 |
| Total         | 4.1800 | 44.0162 | 32.2233 | 0.0403 | 1.7588           | 2.4341          | 4.1929        | 0.8564            | 2.2393           | 3.0957         |          | 4,126.190<br>2 | 4,126.190<br>2 | 1.2643 |                  | 4,152.739<br>6 |

# 3.3 Grading & Excavation - 2017

# **Unmitigated Construction Off-Site**

|          | ROG    | NOx     | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |                 | lb/d             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Hauling  | 3.4012 | 52.5776 | 38.9240 | 0.1524          | 3.5569           | 0.7743          | 4.3312        | 0.9739            | 0.7123           | 1.6862         |          | 15,120.82<br>93 | 15,120.82<br>93 | 0.1114 |     | 15,123.16<br>95 |
| Vendor   | 0.0000 | 0.0000  | 0.0000  | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Worker   | 0.0801 | 0.1014  | 1.2570  | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055        | 236.6055        | 0.0124 |     | 236.8652        |
| Total    | 3.4813 | 52.6790 | 40.1811 | 0.1553          | 3.7804           | 0.7764          | 4.5568        | 1.0332            | 0.7142           | 1.7474         |          | 15,357.43<br>48 | 15,357.43<br>48 | 0.1238 |     | 15,360.03<br>48 |

# **Mitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O                 | CO2e           |
|---------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|---------------------|----------------|
| Category      |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |                     |                |
| Fugitive Dust |        |         |         |        | 0.6860           | 0.0000          | 0.6860        | 0.3340            | 0.0000           | 0.3340         |          |                | 0.0000         |        |                     | 0.0000         |
| Off-Road      | 4.1800 | 44.0162 | 32.2233 | 0.0403 |                  | 2.4341          | 2.4341        |                   | 2.2393           | 2.2393         | 0.0000   | 4,126.190<br>2 | 4,126.190<br>2 | 1.2643 | <br> <br> <br> <br> | 4,152.739<br>6 |
| Total         | 4.1800 | 44.0162 | 32.2233 | 0.0403 | 0.6860           | 2.4341          | 3.1200        | 0.3340            | 2.2393           | 2.5733         | 0.0000   | 4,126.190<br>2 | 4,126.190<br>2 | 1.2643 |                     | 4,152.739<br>6 |

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# 3.3 Grading & Excavation - 2017

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx     | СО      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|----------|--------|---------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category |        |         |         |                 | lb/d             | day             |               |                   |                  |                |          |                 | lb/c            | day    |     |                 |
| Hauling  | 3.4012 | 52.5776 | 38.9240 | 0.1524          | 3.5569           | 0.7743          | 4.3312        | 0.9739            | 0.7123           | 1.6862         |          | 15,120.82<br>93 | 15,120.82<br>93 | 0.1114 |     | 15,123.16<br>95 |
| Vendor   | 0.0000 | 0.0000  | 0.0000  | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000          | 0.0000          | 0.0000 |     | 0.0000          |
| Worker   | 0.0801 | 0.1014  | 1.2570  | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055        | 236.6055        | 0.0124 |     | 236.8652        |
| Total    | 3.4813 | 52.6790 | 40.1811 | 0.1553          | 3.7804           | 0.7764          | 4.5568        | 1.0332            | 0.7142           | 1.7474         |          | 15,357.43<br>48 | 15,357.43<br>48 | 0.1238 |     | 15,360.03<br>48 |

# 3.4 Parking Structure Construction & Paving - 2017

# **Unmitigated Construction On-Site**

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2                      | Total CO2      | CH4    | N2O                 | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|--------------------------------|----------------|--------|---------------------|----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                                | lb/c           | day    |                     |                |
| Off-Road | 2.3895 | 23.5459 | 13.3951 | 0.0226 |                  | 1.2015          | 1.2015        |                   | 1.1148           | 1.1148         |          | 2,237.769<br>2                 | 2,237.769<br>2 | 0.6563 |                     | 2,251.551<br>5 |
| Paving   | 0.0414 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          | <del></del><br> <br> <br> <br> | 0.0000         |        | <br> <br> <br> <br> | 0.0000         |
| Total    | 2.4309 | 23.5459 | 13.3951 | 0.0226 |                  | 1.2015          | 1.2015        |                   | 1.1148           | 1.1148         |          | 2,237.769<br>2                 | 2,237.769      | 0.6563 |                     | 2,251.551<br>5 |

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# 3.4 Parking Structure Construction & Paving - 2017 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Worker   | 0.0801 | 0.1014 | 1.2570 | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055  | 236.6055  | 0.0124 |     | 236.8652 |
| Total    | 0.0801 | 0.1014 | 1.2570 | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055  | 236.6055  | 0.0124 |     | 236.8652 |

# **Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O                 | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|---------------------|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |                     |                |
| Off-Road | 2.3895 | 23.5459 | 13.3951 | 0.0226 |                  | 1.2015          | 1.2015        |                   | 1.1148           | 1.1148         | 0.0000   | 2,237.769<br>2 | 2,237.769<br>2 | 0.6563 |                     | 2,251.551<br>5 |
| Paving   | 0.0414 |         |         |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        | <br> <br> <br> <br> | 0.0000         |
| Total    | 2.4309 | 23.5459 | 13.3951 | 0.0226 |                  | 1.2015          | 1.2015        |                   | 1.1148           | 1.1148         | 0.0000   | 2,237.769<br>2 | 2,237.769      | 0.6563 |                     | 2,251.551<br>5 |

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# 3.4 Parking Structure Construction & Paving - 2017 Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category |        |        |        |                 | lb/o             | day             |               |                   |                  |                |          |           | lb/c      | day    |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Worker   | 0.0801 | 0.1014 | 1.2570 | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055  | 236.6055  | 0.0124 |     | 236.8652 |
| Total    | 0.0801 | 0.1014 | 1.2570 | 2.9100e-<br>003 | 0.2236           | 2.0300e-<br>003 | 0.2256        | 0.0593            | 1.8700e-<br>003  | 0.0612         |          | 236.6055  | 236.6055  | 0.0124 |     | 236.8652 |

# 3.4 Parking Structure Construction & Paving - 2018

**Unmitigated Construction On-Site** 

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Off-Road | 2.0627 | 20.4048 | 12.8049 | 0.0226 |                  | 1.0094          | 1.0094        |                   | 0.9372           | 0.9372         |          | 2,206.063<br>8 | 2,206.063<br>8 | 0.6525 |     | 2,219.765<br>4 |
|          | 0.0414 |         | <br>    |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Total    | 2.1041 | 20.4048 | 12.8049 | 0.0226 |                  | 1.0094          | 1.0094        |                   | 0.9372           | 0.9372         |          | 2,206.063<br>8 | 2,206.063<br>8 | 0.6525 |     | 2,219.765<br>4 |

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# 3.4 Parking Structure Construction & Paving - 2018 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O                 | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|---------------------|----------|
| Category |        |        |        |                 | lb/              | day             |               |                   |                  |                |          |           | lb/c      | day    |                     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |                     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 | <br> <br> <br> <br> | 0.0000   |
| Worker   | 0.0721 | 0.0920 | 1.1422 | 2.9100e-<br>003 | 0.2236           | 1.9600e-<br>003 | 0.2255        | 0.0593            | 1.8100e-<br>003  | 0.0611         |          | 227.9472  | 227.9472  | 0.0115 | <br> <br> <br> <br> | 228.1884 |
| Total    | 0.0721 | 0.0920 | 1.1422 | 2.9100e-<br>003 | 0.2236           | 1.9600e-<br>003 | 0.2255        | 0.0593            | 1.8100e-<br>003  | 0.0611         |          | 227.9472  | 227.9472  | 0.0115 |                     | 228.1884 |

# **Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10    | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O                 | CO2e           |
|----------|--------|---------|---------|--------|---------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|---------------------|----------------|
| Category |        |         |         |        | lb/d                | day             |               |                   |                  |                |          |                | lb/c           | lay    |                     |                |
| Off-Road | 2.0627 | 20.4048 | 12.8049 | 0.0226 |                     | 1.0094          | 1.0094        |                   | 0.9372           | 0.9372         | 0.0000   | 2,206.063<br>8 | 2,206.063<br>8 | 0.6525 |                     | 2,219.765<br>4 |
| Paving   | 0.0414 |         |         |        | <br> <br> <br> <br> | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        | <br> <br> <br> <br> | 0.0000         |
| Total    | 2.1041 | 20.4048 | 12.8049 | 0.0226 |                     | 1.0094          | 1.0094        |                   | 0.9372           | 0.9372         | 0.0000   | 2,206.063<br>8 | 2,206.063<br>8 | 0.6525 |                     | 2,219.765<br>4 |

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# 3.4 Parking Structure Construction & Paving - 2018

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|----------|
| Category |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000   |
| Worker   | 0.0721 | 0.0920 | 1.1422 | 2.9100e-<br>003 | 0.2236           | 1.9600e-<br>003 | 0.2255        | 0.0593            | 1.8100e-<br>003  | 0.0611         |          | 227.9472  | 227.9472  | 0.0115 |     | 228.1884 |
| Total    | 0.0721 | 0.0920 | 1.1422 | 2.9100e-<br>003 | 0.2236           | 1.9600e-<br>003 | 0.2255        | 0.0593            | 1.8100e-<br>003  | 0.0611         |          | 227.9472  | 227.9472  | 0.0115 |     | 228.1884 |

# 3.5 Building Construction - 2018

**Unmitigated Construction On-Site** 

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 2.6687 | 23.2608 | 17.5327 | 0.0268 |                  | 1.4943          | 1.4943        |                   | 1.4048           | 1.4048         |          | 2,609.939<br>0 | 2,609.939<br>0 | 0.6387 |     | 2,623.351<br>7 |
| Total    | 2.6687 | 23.2608 | 17.5327 | 0.0268 |                  | 1.4943          | 1.4943        |                   | 1.4048           | 1.4048         |          | 2,609.939<br>0 | 2,609.939      | 0.6387 |     | 2,623.351<br>7 |

# 3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.9653 | 9.7550  | 12.1269 | 0.0292 | 0.8299           | 0.1527          | 0.9826        | 0.2362            | 0.1405           | 0.3766         |          | 2,834.558<br>3 | 2,834.558<br>3 | 0.0207 |     | 2,834.992<br>8 |
| Worker   | 1.9098 | 2.4388  | 30.2686 | 0.0770 | 5.9242           | 0.0520          | 5.9761        | 1.5711            | 0.0481           | 1.6192         |          | 6,040.599<br>7 | 6,040.599<br>7 | 0.3044 |     | 6,046.992<br>0 |
| Total    | 2.8751 | 12.1939 | 42.3955 | 0.1062 | 6.7540           | 0.2047          | 6.9587        | 1.8073            | 0.1886           | 1.9958         |          | 8,875.157<br>9 | 8,875.157<br>9 | 0.3251 |     | 8,881.984<br>8 |

# **Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Off-Road | 2.6687 | 23.2608 | 17.5327 | 0.0268 |                  | 1.4943          | 1.4943        |                   | 1.4048           | 1.4048         | 0.0000   | 2,609.938<br>9 | 2,609.938<br>9 | 0.6387 |     | 2,623.351<br>7 |
| Total    | 2.6687 | 23.2608 | 17.5327 | 0.0268 |                  | 1.4943          | 1.4943        |                   | 1.4048           | 1.4048         | 0.0000   | 2,609.938<br>9 | 2,609.938<br>9 | 0.6387 |     | 2,623.351<br>7 |

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# 3.5 Building Construction - 2018

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O                 | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|---------------------|----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | lay    |                     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |                     | 0.0000         |
| Vendor   | 0.9653 | 9.7550  | 12.1269 | 0.0292 | 0.8299           | 0.1527          | 0.9826        | 0.2362            | 0.1405           | 0.3766         |          | 2,834.558<br>3 | 2,834.558<br>3 | 0.0207 | <br> <br> <br> <br> | 2,834.992<br>8 |
| Worker   | 1.9098 | 2.4388  | 30.2686 | 0.0770 | 5.9242           | 0.0520          | 5.9761        | 1.5711            | 0.0481           | 1.6192         |          | 6,040.599<br>7 | 6,040.599<br>7 | 0.3044 | <br> <br> <br> <br> | 6,046.992<br>0 |
| Total    | 2.8751 | 12.1939 | 42.3955 | 0.1062 | 6.7540           | 0.2047          | 6.9587        | 1.8073            | 0.1886           | 1.9958         |          | 8,875.157<br>9 | 8,875.157<br>9 | 0.3251 |                     | 8,881.984<br>8 |

# 3.5 Building Construction - 2019

**Unmitigated Construction On-Site** 

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/e             | day             |               |                   |                  |                |          |                | lb/d           | lay    |     |                |
|          | 2.3516 | 20.9650 | 17.1204 | 0.0268 |                  | 1.2850          | 1.2850        |                   | 1.2083           | 1.2083         |          | 2,580.761<br>8 | 2,580.761<br>8 | 0.6279 |     | 2,593.947<br>9 |
| Total    | 2.3516 | 20.9650 | 17.1204 | 0.0268 |                  | 1.2850          | 1.2850        |                   | 1.2083           | 1.2083         |          | 2,580.761<br>8 | 2,580.761<br>8 | 0.6279 |     | 2,593.947<br>9 |

# 3.5 Building Construction - 2019 Unmitigated Construction Off-Site

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.9161 | 9.0001  | 11.6874 | 0.0290 | 0.8300           | 0.1452          | 0.9752        | 0.2362            | 0.1335           | 0.3697         |          | 2,776.426<br>1 | 2,776.426<br>1 | 0.0202 | ,   | 2,776.851<br>0 |
| Worker   | 1.7549 | 2.2361  | 27.7951 | 0.0767 | 5.9242           | 0.0507          | 5.9748        | 1.5711            | 0.0470           | 1.6181         |          | 5,803.926<br>4 | 5,803.926<br>4 | 0.2845 | ,   | 5,809.901<br>2 |
| Total    | 2.6711 | 11.2362 | 39.4825 | 0.1057 | 6.7542           | 0.1958          | 6.9500        | 1.8073            | 0.1805           | 1.9878         |          | 8,580.352<br>5 | 8,580.352<br>5 | 0.3047 |     | 8,586.752<br>1 |

# **Mitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | lay    |     |                |
| Off-Road | 2.3516 | 20.9650 | 17.1204 | 0.0268 |                  | 1.2850          | 1.2850        |                   | 1.2083           | 1.2083         | 0.0000   | 2,580.761<br>8 | 2,580.761<br>8 | 0.6279 |     | 2,593.947<br>9 |
| Total    | 2.3516 | 20.9650 | 17.1204 | 0.0268 |                  | 1.2850          | 1.2850        |                   | 1.2083           | 1.2083         | 0.0000   | 2,580.761<br>8 | 2,580.761<br>8 | 0.6279 |     | 2,593.947<br>9 |

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# 3.5 Building Construction - 2019

# **Mitigated Construction Off-Site**

|          | ROG    | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| Hauling  | 0.0000 | 0.0000  | 0.0000  | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.9161 | 9.0001  | 11.6874 | 0.0290 | 0.8300           | 0.1452          | 0.9752        | 0.2362            | 0.1335           | 0.3697         |          | 2,776.426<br>1 | 2,776.426<br>1 | 0.0202 |     | 2,776.851<br>0 |
| Worker   | 1.7549 | 2.2361  | 27.7951 | 0.0767 | 5.9242           | 0.0507          | 5.9748        | 1.5711            | 0.0470           | 1.6181         |          | 5,803.926<br>4 | 5,803.926<br>4 | 0.2845 |     | 5,809.901<br>2 |
| Total    | 2.6711 | 11.2362 | 39.4825 | 0.1057 | 6.7542           | 0.1958          | 6.9500        | 1.8073            | 0.1805           | 1.9878         |          | 8,580.352<br>5 | 8,580.352<br>5 | 0.3047 |     | 8,586.752<br>1 |

# 3.6 Architectural Coating - 2019

**Unmitigated Construction On-Site** 

|                 | ROG     | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|-----------------|---------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category        |         |        |        |        | lb/o             | day             |               |                   |                  |                |          |                | lb/c           | day    |     |                |
| Archit. Coating | 21.9237 |        |        |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |     | 0.0000         |
| Off-Road        | 1.0658  | 7.3415 | 7.3653 | 0.0119 |                  | 0.5151          | 0.5151        |                   | 0.5151           | 0.5151         |          | 1,125.792<br>2 | 1,125.792<br>2 | 0.0951 |     | 1,127.789<br>0 |
| Total           | 22.9895 | 7.3415 | 7.3653 | 0.0119 |                  | 0.5151          | 0.5151        |                   | 0.5151           | 0.5151         |          | 1,125.792<br>2 | 1,125.792<br>2 | 0.0951 |     | 1,127.789<br>0 |

# 3.6 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | CO     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O                 | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|---------------------|----------------|
| Category |        |        |        |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |                     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |                     | 0.0000         |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 | <br> <br> <br> <br> | 0.0000         |
| Worker   | 0.3510 | 0.4472 | 5.5590 | 0.0153 | 1.1848           | 0.0101          | 1.1950        | 0.3142            | 9.4000e-<br>003  | 0.3236         |          | 1,160.785<br>3 | 1,160.785<br>3 | 0.0569 | <br> <br> <br> <br> | 1,161.980<br>2 |
| Total    | 0.3510 | 0.4472 | 5.5590 | 0.0153 | 1.1848           | 0.0101          | 1.1950        | 0.3142            | 9.4000e-<br>003  | 0.3236         |          | 1,160.785<br>3 | 1,160.785<br>3 | 0.0569 |                     | 1,161.980<br>2 |

# **Mitigated Construction On-Site**

|                 | ROG     | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O            | CO2e           |
|-----------------|---------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|----------------|----------------|
| Category        |         |        |        |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |                |                |
| Archit. Coating | 21.9237 |        |        |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         |          |                | 0.0000         |        |                | 0.0000         |
| Off-Road        | 1.0658  | 7.3415 | 7.3653 | 0.0119 |                  | 0.5151          | 0.5151        |                   | 0.5151           | 0.5151         | 0.0000   | 1,125.792<br>2 | 1,125.792<br>2 | 0.0951 | <br> <br> <br> | 1,127.789<br>0 |
| Total           | 22.9895 | 7.3415 | 7.3653 | 0.0119 |                  | 0.5151          | 0.5151        |                   | 0.5151           | 0.5151         | 0.0000   | 1,125.792<br>2 | 1,125.792<br>2 | 0.0951 |                | 1,127.789<br>0 |

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# 3.6 Architectural Coating - 2019 Mitigated Construction Off-Site

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |        |        |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |     |                |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000         | 0.0000         | 0.0000 |     | 0.0000         |
| Worker   | 0.3510 | 0.4472 | 5.5590 | 0.0153 | 1.1848           | 0.0101          | 1.1950        | 0.3142            | 9.4000e-<br>003  | 0.3236         |          | 1,160.785<br>3 | 1,160.785<br>3 | 0.0569 |     | 1,161.980<br>2 |
| Total    | 0.3510 | 0.4472 | 5.5590 | 0.0153 | 1.1848           | 0.0101          | 1.1950        | 0.3142            | 9.4000e-<br>003  | 0.3236         |          | 1,160.785<br>3 | 1,160.785<br>3 | 0.0569 |     | 1,161.980<br>2 |

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

|             | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|-------------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category    |         |         |          |        | lb/d             | day             |               |                   |                  |                |          |                 | lb/c            | lay    |     |                 |
| Mitigated   | 29.9875 | 63.7828 | 274.5773 | 0.7546 | 48.5457          | 1.0337          | 49.5794       | 12.9827           | 0.9535           | 13.9362        |          | 58,524.88<br>78 | 58,524.88<br>78 | 2.1777 |     | 58,570.61<br>86 |
| Unmitigated | 29.9875 | 63.7828 | 274.5773 | 0.7546 | 48.5457          | 1.0337          | 49.5794       | 12.9827           | 0.9535           | 13.9362        |          | 58,524.88<br>78 | 58,524.88<br>78 | 2.1777 |     | 58,570.61<br>86 |

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# **4.2 Trip Summary Information**

|                                | Ave      | rage Daily Trip Ra | ate       | Unmitigated | Mitigated  |
|--------------------------------|----------|--------------------|-----------|-------------|------------|
| Land Use                       | Weekday  | Saturday           | Sunday    | Annual VMT  | Annual VMT |
| Apartments Mid Rise            | 2,899.60 | 3,150.40           | 2670.80   | 9,919,113   | 9,919,113  |
| Enclosed Parking with Elevator | 0.00     | 0.00               | 0.00      |             |            |
| Other Asphalt Surfaces         | 0.00     | 0.00               | 0.00      |             |            |
| Parking Lot                    | 0.00     | 0.00               | 0.00      |             |            |
| Regional Shopping Center       | 659.26   | 771.39             | 389.68    | 1,377,230   | 1,377,230  |
| Supermarket                    | 4,545.68 | 7,895.63           | 7400.02   | 7,167,378   | 7,167,378  |
| Total                          | 8,104.55 | 11,817.42          | 10,460.49 | 18,463,721  | 18,463,721 |

# **4.3 Trip Type Information**

|                                |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted    | Pass-by |
| Apartments Mid Rise            | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Enclosed Parking with Elevator | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Other Asphalt Surfaces         | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Parking Lot                    | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Regional Shopping Center       | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |
| Supermarket                    | 16.60      | 8.40       | 6.90        | 6.50       | 74.50      | 19.00       | 34      | 30          | 36      |

| LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.530094 | 0.057664 | 0.178835 | 0.124843 | 0.039181 | 0.006319 | 0.017052 | 0.034445 | 0.002509 | 0.003148 | 0.003693 | 0.000531 | 0.001685 |

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

Exceed Title 24

Install High Efficiency Lighting

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|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |        |                |
|          | 0.1125 | 0.9773 | 0.5282 | 6.1300e-<br>003 |                  | 0.0777          | 0.0777        |                   | 0.0777           | 0.0777         |          | 1,226.885<br>3 | 1,226.885<br>3 | 0.0235 | 0.0225 | 1,234.351<br>9 |
|          | 0.1255 | 1.0897 | 0.5845 | 6.8400e-<br>003 |                  | 0.0867          | 0.0867        |                   | 0.0867           | 0.0867         |          | 1,368.763<br>7 | 1,368.763<br>7 | 0.0262 | 0.0251 | 1,377.093<br>7 |

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

|                                | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5    | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|--------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|----------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                       | kBTU/yr            |                 |                 |                 |                 | lb/d             | day             |                 |                      |                  |                 |          |                | lb/c           | lay             |                 |                |
| Enclosed Parking with Elevator | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          | <br>                 | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |
| Parking Lot                    | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          | ,<br> <br> <br> <br> | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |
| Regional<br>Shopping Center    |                    | 8.2000e-<br>004 | 7.4200e-<br>003 | 6.2300e-<br>003 | 4.0000e-<br>005 |                  | 5.6000e-<br>004 | 5.6000e-<br>004 | ,                    | 5.6000e-<br>004  | 5.6000e-<br>004 |          | 8.9014         | 8.9014         | 1.7000e-<br>004 | 1.6000e-<br>004 | 8.9555         |
| Supermarket                    | 2896.47            | 0.0312          | 0.2840          | 0.2385          | 1.7000e-<br>003 |                  | 0.0216          | 0.0216          | ,                    | 0.0216           | 0.0216          |          | 340.7613       | 340.7613       | 6.5300e-<br>003 | 6.2500e-<br>003 | 342.8351       |
| Apartments Mid<br>Rise         | 8662.36            | 0.0934          | 0.7983          | 0.3397          | 5.1000e-<br>003 |                  | 0.0645          | 0.0645          |                      | 0.0645           | 0.0645          |          | 1,019.101<br>0 | 1,019.101<br>0 | 0.0195          | 0.0187          | 1,025.303<br>1 |
| Total                          |                    | 0.1255          | 1.0897          | 0.5845          | 6.8400e-<br>003 |                  | 0.0867          | 0.0867          |                      | 0.0867           | 0.0867          |          | 1,368.763<br>7 | 1,368.763<br>7 | 0.0262          | 0.0251          | 1,377.093<br>7 |

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

|                                   | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|-----------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Land Use                          | kBTU/yr            |                 |                 |                 |                 | lb/d             | day             |                 |                   |                  |                 |          |                | lb/c           | lay             |                 |                |
| Parking Lot                       | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |
| Regional<br>Shopping Center       | 0.0675837          | 7.3000e-<br>004 | 6.6300e-<br>003 | 5.5700e-<br>003 | 4.0000e-<br>005 |                  | 5.0000e-<br>004 | 5.0000e-<br>004 |                   | 5.0000e-<br>004  | 5.0000e-<br>004 |          | 7.9510         | 7.9510         | 1.5000e-<br>004 | 1.5000e-<br>004 | 7.9994         |
| Supermarket                       | 2.69741            | 0.0291          | 0.2645          | 0.2221          | 1.5900e-<br>003 |                  | 0.0201          | 0.0201          |                   | 0.0201           | 0.0201          |          | 317.3425       | 317.3425       | 6.0800e-<br>003 | 5.8200e-<br>003 | 319.2738       |
| Apartments Mid<br>Rise            | 7.66353            | 0.0827          | 0.7063          | 0.3005          | 4.5100e-<br>003 |                  | 0.0571          | 0.0571          |                   | 0.0571           | 0.0571          |          | 901.5918       | 901.5918       | 0.0173          | 0.0165          | 907.0788       |
| Enclosed Parking<br>with Elevator | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |
| Total                             |                    | 0.1125          | 0.9773          | 0.5282          | 6.1400e-<br>003 |                  | 0.0777          | 0.0777          |                   | 0.0777           | 0.0777          |          | 1,226.885<br>3 | 1,226.885<br>3 | 0.0235          | 0.0225          | 1,234.352<br>0 |

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

|             | ROG     | NOx    | CO      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|---------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category    |         |        |         |                 | lb/d             | lay             |               |                   |                  |                |          |           | lb/d      | day    |        |         |
| Mitigated   | 19.8635 | 0.4222 | 36.5240 | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                   | 0.2006           | 0.2006         | 0.0000   | 65.5819   | 65.5819   | 0.0643 | 0.0000 | 66.9327 |
| Unmitigated | 19.8635 | 0.4222 | 36.5240 | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                   | 0.2006           | 0.2006         | 0.0000   | 65.5819   | 65.5819   | 0.0643 | 0.0000 | 66.9327 |

# 6.2 Area by SubCategory

# **Unmitigated**

|                          | ROG     | NOx    | СО      | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|--------------------------|---------|--------|---------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| SubCategory              |         |        |         |                 | lb/d             | day             |               |                   |                  |                |          |           | lb/d      | lay    |        |         |
| Architectural<br>Coating | 1.3635  |        |         |                 |                  | 0.0000          | 0.0000        | 1                 | 0.0000           | 0.0000         |          |           | 0.0000    |        |        | 0.0000  |
| Consumer<br>Products     | 17.3813 |        |         |                 |                  | 0.0000          | 0.0000        | ·                 | 0.0000           | 0.0000         |          |           | 0.0000    |        |        | 0.0000  |
| Hearth                   | 0.0000  | 0.0000 | 0.0000  | 0.0000          |                  | 0.0000          | 0.0000        | ·                 | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Landscaping              | 1.1187  | 0.4222 | 36.5240 | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        | 1<br>1<br>1<br>1  | 0.2006           | 0.2006         |          | 65.5819   | 65.5819   | 0.0643 |        | 66.9327 |
| Total                    | 19.8635 | 0.4222 | 36.5240 | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                   | 0.2006           | 0.2006         | 0.0000   | 65.5819   | 65.5819   | 0.0643 | 0.0000 | 66.9327 |

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#### 6.2 Area by SubCategory

#### **Mitigated**

|             | ROG     | NOx    | CO                  | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5   | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|---------|--------|---------------------|-----------------|------------------|-----------------|---------------|---------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| SubCategory |         |        |                     |                 | lb/d             | day             |               |                     |                  |                |          |           | lb/d      | lay    |        |         |
|             | 1.3635  |        | i<br>i              |                 |                  | 0.0000          | 0.0000        | <br>                | 0.0000           | 0.0000         |          |           | 0.0000    |        |        | 0.0000  |
|             | 17.3813 |        | <br> <br> <br> <br> | <br>            |                  | 0.0000          | 0.0000        | <br> <br> <br> <br> | 0.0000           | 0.0000         |          |           | 0.0000    |        |        | 0.0000  |
| Hearth      | 0.0000  | 0.0000 | 0.0000              | 0.0000          |                  | 0.0000          | 0.0000        | <br> <br> <br> <br> | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Landscaping | 1.1187  | 0.4222 | 36.5240             | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                     | 0.2006           | 0.2006         |          | 65.5819   | 65.5819   | 0.0643 |        | 66.9327 |
| Total       | 19.8635 | 0.4222 | 36.5240             | 1.9200e-<br>003 |                  | 0.2006          | 0.2006        |                     | 0.2006           | 0.2006         | 0.0000   | 65.5819   | 65.5819   | 0.0643 | 0.0000 | 66.9327 |

#### 7.0 Water Detail

# 7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

# 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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# 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

# 10.0 Vegetation

# APPENDIX B EXISTING SITE LAND USES EMISSIONS CALCULATION DATA

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# **Woodley & SF Mission - Existing Uses**

#### Los Angeles-South Coast County, Summer

# 1.0 Project Characteristics

#### 1.1 Land Usage

| Land Uses                           | Size  | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building          | 35.00 | 1000sqft | 0.80        | 35,000.00          | 0          |
| Medical Office Building             | 6.20  | 1000sqft | 0.14        | 6,200.00           | 0          |
| High Turnover (Sit Down Restaurant) | 12.41 | 1000sqft | 0.28        | 12,410.00          | 0          |
| Fast Food Restaurant w/o Drive Thru | 1.25  | 1000sqft | 0.03        | 1,250.00           | 0          |
| Regional Shopping Center            | 19.26 | 1000sqft | 0.44        | 19,257.00          | 0          |
| Place of Worship                    | 1.27  | 1000sqft | 0.03        | 1,274.00           | 0          |
| Parking Lot                         | 6.23  | Acre     | 6.23        | 271,378.80         | 0          |

# 1.2 Other Project Characteristics

| Urbanization    | Urban                     | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 33   |
|-----------------|---------------------------|------------------|-----|---------------------------|------|
| Climate Zone    | 12                        |                  |     | Operational Year          | 2016 |
| Utility Company | Martines Cogen Ltd. Partr | nership          |     |                           |      |

 CO2 Intensity
 945.27
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - Demolition and construction are not evaluated for the existing use scenario.

Off-road Equipment - Demolition and construction are not evaluated for the existing use scenario.

Vehicle Trips - Default trip rates have been revised to be consistent with the Technical Traffic Evaluation prepared for the proposed project. Includes the 10% reduction for internal trips for some uses.

Area Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Water And Wastewater - Assumes no outdoor water use due to minimal landscaping.

Sequestration - Assumes 33 existing trees at the site.

Waste Mitigation - Assumes a solid waste reduction of at least 50% per current city recycling requirements.

Land Use Change -

| Table Name                | Column Name                                   | Default Value | New Value |
|---------------------------|---|---------------|-----------|
| tblAreaCoating            | Area_EF_Nonresidential_Exterior               | 250           | 50        |
| tblAreaCoating            | Area_EF_Nonresidential_Interior               | 250           | 50        |
| tblAreaCoating            | Area_EF_Residential_Exterior                  | 100           | 50        |
| tblAreaMitigation         | UseLowVOCPaintNonresidentialExteriorV<br>alue | 50            | 250       |
| tblConstructionPhase      | NumDays                                       | 20.00         | 1.00      |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount                    | 1.00          | 0.00      |
| tblProjectCharacteristics | OperationalYear                               | 2014          | 2016      |
| tblSequestration          | NumberOfNewTrees                              | 0.00          | 33.00     |
| tblTripsAndVMT            | WorkerTripNumber                              | 13.00         | 0.00      |
| tblVehicleTrips           | DV_TP   | 37.00         | 25.00     |
| tblVehicleTrips           | DV_TP   | 20.00         | 40.00     |
| tblVehicleTrips           | DV_TP   | 35.00         | 15.00     |
| tblVehicleTrips           | PB_TP   | 12.00         | 50.00     |
| tblVehicleTrips           | PB_TP   | 43.00         | 10.00     |
| tblVehicleTrips           | PB_TP   | 11.00         | 40.00     |
| tblVehicleTrips           | PR_TP   | 51.00         | 25.00     |

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| tblVehicleTrips | PR_TP               | 37.00        | 50.00  |
|-----------------|---------------------|--------------|--------|
| tblVehicleTrips | PR_TP               | 54.00        | 45.00  |
| tblVehicleTrips | ST_TR               | 696.00       | 446.51 |
| tblVehicleTrips | ST_TR               | 158.37       | 142.53 |
| tblVehicleTrips | ST_TR               | 8.96         | 8.06   |
| tblVehicleTrips | ST_TR               | 49.97        | 44.97  |
| tblVehicleTrips | SU_TR               | 500.00       | 446.51 |
| tblVehicleTrips | SU_TR               | 131.84       | 118.66 |
| tblVehicleTrips | SU_TR               | 1.55         | 1.40   |
| tblVehicleTrips | SU_TR               | 25.24        | 22.72  |
| tblVehicleTrips | WD_TR               | 716.00       | 446.51 |
| tblVehicleTrips | WD_TR               | 68.93        | 166.02 |
| tblVehicleTrips | WD_TR               | 127.15       | 114.44 |
| tblVehicleTrips | WD_TR               | 36.13        | 32.52  |
| tblVehicleTrips | WD_TR               | 42.94        | 38.43  |
| tblWater        | OutdoorWaterUseRate | 24,218.12    | 0.00   |
| tblWater        | OutdoorWaterUseRate | 4,261,570.68 | 0.00   |
| tblWater        | OutdoorWaterUseRate | 240,437.45   | 0.00   |
| tblWater        | OutdoorWaterUseRate | 148,186.54   | 0.00   |
| tblWater        | OutdoorWaterUseRate | 62,152.61    | 0.00   |
| tblWater        | OutdoorWaterUseRate | 874,390.27   | 0.00   |
|                 |                     |              |        |

# 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission)

# **Unmitigated Construction**

|       | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Year  |        |         |         |        | lb/d             | lb/day          |               |                   |                  |                |          |                |                |        |        |                |
| 2017  | 3.4673 | 38.4359 | 30.1443 | 0.0337 | 0.0000           | 1.8186          | 1.8186        | 0.0000            | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 | 0.0000 | 3,465.961<br>4 |
| Total | 3.4673 | 38.4359 | 30.1443 | 0.0337 | 0.0000           | 1.8186          | 1.8186        | 0.0000            | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 | 0.0000 | 3,465.961<br>4 |

#### **Mitigated Construction**

|       | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Year  |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/d           | day    |        |                |
| 2017  | 3.4673 | 38.4359 | 30.1443 | 0.0337 | 0.0000           | 1.8186          | 1.8186        | 0.0000            | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 | 0.0000 | 3,465.961<br>4 |
| Total | 3.4673 | 38.4359 | 30.1443 | 0.0337 | 0.0000           | 1.8186          | 1.8186        | 0.0000            | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 | 0.0000 | 3,465.961<br>4 |

|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00             | 0.00            | 0.00          | 0.00              | 0.00             | 0.00           | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

# 2.2 Overall Operational

# **Unmitigated Operational**

|          | ROG     | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|----------|---------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| Category |         |                 |                 |                 | lb/d             | day             |                 |                   |                  |                 |          |                 | lb/d            | day             |        |                 |
| Area     | 6.9730  | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000          |                  | 3.0000e-<br>005 | 3.0000e-<br>005 |                   | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179          | 0.0179          | 5.0000e-<br>005 |        | 0.0189          |
| Energy   | 0.1090  | 0.9911          | 0.8325          | 5.9500e-<br>003 |                  | 0.0753          | 0.0753          |                   | 0.0753           | 0.0753          |          | 1,189.342<br>0  | 1,189.342<br>0  | 0.0228          | 0.0218 | 1,196.580<br>1  |
| Mobile   | 31.2052 | 71.2760         | 304.6687        | 0.6459          | 41.8526          | 0.9993          | 42.8519         | 11.1904           | 0.9186           | 12.1090         |          | 56,884.39<br>37 | 56,884.39<br>37 | 2.4303          |        | 56,935.43<br>01 |
| Total    | 38.2872 | 72.2672         | 305.5098        | 0.6518          | 41.8526          | 1.0746          | 42.9272         | 11.1904           | 0.9939           | 12.1843         |          | 58,073.75<br>35 | 58,073.75<br>35 | 2.4532          | 0.0218 | 58,132.02<br>91 |

# **Mitigated Operational**

|          | ROG     | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|----------|---------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| Category |         |                 |                 |                 | lb/d             | day             |                 |                   |                  |                 |          |                 | lb/d            | day             |        |                 |
| Area     | 6.9730  | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000          |                  | 3.0000e-<br>005 | 3.0000e-<br>005 |                   | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179          | 0.0179          | 5.0000e-<br>005 |        | 0.0189          |
| Energy   | 0.1090  | 0.9911          | 0.8325          | 5.9500e-<br>003 |                  | 0.0753          | 0.0753          |                   | 0.0753           | 0.0753          |          | 1,189.342<br>0  | 1,189.342<br>0  | 0.0228          | 0.0218 | 1,196.580<br>1  |
| Mobile   | 31.2052 | 71.2760         | 304.6687        | 0.6459          | 41.8526          | 0.9993          | 42.8519         | 11.1904           | 0.9186           | 12.1090         |          | 56,884.39<br>37 | 56,884.39<br>37 | 2.4303          |        | 56,935.43<br>01 |
| Total    | 38.2872 | 72.2672         | 305.5098        | 0.6518          | 41.8526          | 1.0746          | 42.9272         | 11.1904           | 0.9939           | 12.1843         |          | 58,073.75<br>35 | 58,073.75<br>35 | 2.4532          | 0.0218 | 58,132.02<br>91 |

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|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00             | 0.00            | 0.00          | 0.00              | 0.00             | 0.00           | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

# 3.0 Construction Detail

#### **Construction Phase**

|   | Phase<br>Number | Phase Name | Phase Type | Start Date | End Date | Num Days<br>Week | Num Days | Phase Description |
|---|-----------------|------------|------------|------------|----------|------------------|----------|-------------------|
| 1 | I               | Demolition | Demolition | 1/1/2017   | 1/2/2017 | 5                | 1        |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

| Phase Name | Offroad Equipment Type   | Amount | Usage Hours | Horse Power | Load Factor |
|------------|--------------------------|--------|-------------|-------------|-------------|
| Demolition | Excavators               | 3      | 8.00        | 162         | 0.38        |
| Demolition | Rubber Tired Dozers      | 2      | 8.00        | 255         | 0.40        |
| Demolition | Concrete/Industrial Saws | 0      | 8.00        | 81          | 0.73        |

#### **Trips and VMT**

| Phase Name | Offroad Equipment | Worker Trip | Vendor Trip | Hauling Trip | Worker Trip | Vendor Trip | Hauling Trip | Worker Vehicle | Vendor        | Hauling       |
|------------|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|----------------|---------------|---------------|
|            | Count             | Number      | Number      | Number       | Length      | Length      | Length       | Class          | Vehicle Class | Vehicle Class |
| Demolition | 5                 | 0.00        | 0.00        | 0.00         | 14.70       | 6.90        | 20.00        | LD_Mix         | HDT_Mix       | HHDT          |

#### **3.1 Mitigation Measures Construction**

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3.2 Demolition - 2017
<u>Unmitigated Construction On-Site</u>

|          | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|----------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
|          | 3.4673 | 38.4359 | 30.1443 | 0.0337 |                  | 1.8186          | 1.8186        |                   | 1.6731           | 1.6731         |          | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 |     | 3,465.961<br>4 |
| Total    | 3.4673 | 38.4359 | 30.1443 | 0.0337 |                  | 1.8186          | 1.8186        |                   | 1.6731           | 1.6731         |          | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 |     | 3,465.961<br>4 |

# **Unmitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e   |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|--------|
| Category |        |        |        |        | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |        |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total    | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

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# 3.2 Demolition - 2017 <u>Mitigated Construction On-Site</u>

|             | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O | CO2e           |
|-------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|-----|----------------|
| Category    |        |         |         |        | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |     |                |
| - Cil rioud | 3.4673 | 38.4359 | 30.1443 | 0.0337 |                  | 1.8186          | 1.8186        |                   | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 |     | 3,465.961<br>4 |
| Total       | 3.4673 | 38.4359 | 30.1443 | 0.0337 |                  | 1.8186          | 1.8186        |                   | 1.6731           | 1.6731         | 0.0000   | 3,443.802<br>7 | 3,443.802<br>7 | 1.0552 |     | 3,465.961<br>4 |

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx    | CO     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e   |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|-----|--------|
| Category |        |        |        |        | lb/d             | day             |               |                   |                  |                |          |           | lb/c      | lay    |     |        |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |
| Total    | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         |          | 0.0000    | 0.0000    | 0.0000 |     | 0.0000 |

# 4.0 Operational Detail - Mobile

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# **4.1 Mitigation Measures Mobile**

|             | ROG     | NOx     | СО       | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4    | N2O | CO2e            |
|-------------|---------|---------|----------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|--------|-----|-----------------|
| Category    |         |         |          |        | lb/d             | day             |               |                   |                  |                |          |                 | lb/c            | ay     |     |                 |
| Unmitigated | 31.2052 | 71.2760 | 304.6687 | 0.6459 | 41.8526          | 0.9993          | 42.8519       | 11.1904           | 0.9186           | 12.1090        |          | 56,884.39<br>37 | 56,884.39<br>37 | 2.4303 |     | 56,935.43<br>01 |
| Mitigated   | 31.2052 | 71.2760 | 304.6687 | 0.6459 | 41.8526          | 0.9993          | 42.8519       | 11.1904           | 0.9186           | 12.1090        |          | 56,884.39<br>37 | 56,884.39<br>37 | 2.4303 |     | 56,935.43<br>01 |

# **4.2 Trip Summary Information**

|                                     | Aver     | rage Daily Trip Ra | ite      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Fast Food Restaurant w/o Drive Thru | 558.14   | 558.14             | 558.14   | 533,173     | 533,173    |
| Government Office Building          | 5,810.70 | 0.00               | 0.00     | 9,773,453   | 9,773,453  |
| High Turnover (Sit Down Restaurant) | 1,420.20 | 1,768.80           | 1472.57  | 2,848,851   | 2,848,851  |
| Medical Office Building             | 201.62   | 49.97              | 8.68     | 395,294     | 395,294    |
| Parking Lot                         | 0.00     | 0.00               | 0.00     |             |            |
| Place of Worship                    | 11.61    | 13.21              | 46.67    | 35,925      | 35,925     |
| Regional Shopping Center            | 740.05   | 865.99             | 437.52   | 1,209,294   | 1,209,294  |
| Total                               | 8,742.31 | 3,256.11           | 2,523.57 | 14,795,990  | 14,795,990 |

# **4.3 Trip Type Information**

|                                |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted    | Pass-by |
| Fast Food Restaurant w/o Drive | 16.60      | 8.40       | 6.90        | 1.50       | 79.50      | 19.00       | 25      | 25          | 50      |
| Government Office Building     | 16.60      | 8.40       | 6.90        | 33.00      | 62.00      | 5.00        | 50      | 34          | 16      |
| High Turnover (Sit Down        | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 50      | 40          | 10      |
| Medical Office Building        | 16.60      | 8.40       | 6.90        | 29.60      | 51.40      | 19.00       | 60      | 30          | 10      |
| Parking Lot                    | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Place of Worship               | 16.60      | 8.40       | 6.90        | 0.00       | 95.00      | 5.00        | 64      | 25          | 11      |
| Regional Shopping Center       | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 45      | 15          | 40      |

| LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.533598 | 0.058434 | 0.178244 | 0.125508 | 0.038944 | 0.006283 | 0.016425 | 0.031066 | 0.002453 | 0.003157 | 0.003691 | 0.000543 | 0.001655 |
|          |          |          |          |          |          |          |          |          |          |          |          |          |

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

|                         | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category                |        |        |        |                 | lb/d             | day             |               |                   |                  |                |          |                | lb/c           | lay    |        |                |
| NaturalGas<br>Mitigated | 0.1090 | 0.9911 | 0.8325 | 5.9500e-<br>003 |                  | 0.0753          | 0.0753        |                   | 0.0753           | 0.0753         |          | 1,189.342<br>0 | 1,189.342<br>0 | 0.0228 | 0.0218 | 1,196.580<br>1 |
| Unmitigated             | 0.1090 | 0.9911 | 0.8325 | 5.9500e-<br>003 |                  | 0.0753          | 0.0753        |                   | 0.0753           | 0.0753         |          | 1,189.342<br>0 | 1,189.342<br>0 | 0.0228 | 0.0218 | 1,196.580<br>1 |

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

|                                     | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |  |  |  |  |
|-------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|--|--|--|--|
| Land Use                            | kBTU/yr            |                 | lb/day          |                 |                 |                  |                 |                 |                   |                  |                 |          |                | lb/day         |                 |                 |                |  |  |  |  |
| Government<br>Office Building       | 1048.08            | 0.0113          | 0.1028          | 0.0863          | 6.2000e-<br>004 |                  | 7.8100e-<br>003 | 7.8100e-<br>003 |                   | 7.8100e-<br>003  | 7.8100e-<br>003 |          | 123.3038       | 123.3038       | 2.3600e-<br>003 | 2.2600e-<br>003 | 124.0542       |  |  |  |  |
| High Turnover (Sit Down Restaurant) |                    | 0.0854          | 0.7767          | 0.6524          | 4.6600e-<br>003 |                  | 0.0590          | 0.0590          |                   | 0.0590           | 0.0590          |          | 932.0400       | 932.0400       | 0.0179          | 0.0171          | 937.7122       |  |  |  |  |
| Medical Office<br>Building          | 185.66             | 2.0000e-<br>003 | 0.0182          | 0.0153          | 1.1000e-<br>004 |                  | 1.3800e-<br>003 | 1.3800e-<br>003 |                   | 1.3800e-<br>003  | 1.3800e-<br>003 |          | 21.8424        | 21.8424        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9753        |  |  |  |  |
| Parking Lot                         | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |  |  |  |  |
| Place of Worship                    | 65.6546            | 7.1000e-<br>004 | 6.4400e-<br>003 | 5.4100e-<br>003 | 4.0000e-<br>005 |                  | 4.9000e-<br>004 | 4.9000e-<br>004 |                   | 4.9000e-<br>004  | 4.9000e-<br>004 |          | 7.7241         | 7.7241         | 1.5000e-<br>004 | 1.4000e-<br>004 | 7.7711         |  |  |  |  |
| Regional<br>Shopping Center         | 89.6901            | 9.7000e-<br>004 | 8.7900e-<br>003 | 7.3900e-<br>003 | 5.0000e-<br>005 |                  | 6.7000e-<br>004 | 6.7000e-<br>004 |                   | 6.7000e-<br>004  | 6.7000e-<br>004 |          | 10.5518        | 10.5518        | 2.0000e-<br>004 | 1.9000e-<br>004 | 10.6160        |  |  |  |  |
| Fast Food<br>Restaurant w/o         | 797.979            | 8.6100e-<br>003 | 0.0782          | 0.0657          | 4.7000e-<br>004 |                  | 5.9500e-<br>003 | 5.9500e-<br>003 |                   | 5.9500e-<br>003  | 5.9500e-<br>003 |          | 93.8799        | 93.8799        | 1.8000e-<br>003 | 1.7200e-<br>003 | 94.4513        |  |  |  |  |
| Total                               |                    | 0.1090          | 0.9911          | 0.8326          | 5.9500e-<br>003 |                  | 0.0753          | 0.0753          |                   | 0.0753           | 0.0753          |          | 1,189.342<br>0 | 1,189.342<br>0 | 0.0228          | 0.0218          | 1,196.580<br>1 |  |  |  |  |

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# **5.2 Energy by Land Use - NaturalGas Mitigated**

|                                     | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |  |  |  |
|-------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|----------------|----------------|-----------------|-----------------|----------------|--|--|--|
| Land Use                            | kBTU/yr            |                 | lb/day          |                 |                 |                  |                 |                 |                   |                  |                 |          |                | lb/day         |                 |                 |                |  |  |  |
| High Turnover (Sit Down Restaurant) |                    | 0.0854          | 0.7767          | 0.6524          | 4.6600e-<br>003 |                  | 0.0590          | 0.0590          |                   | 0.0590           | 0.0590          |          | 932.0400       | 932.0400       | 0.0179          | 0.0171          | 937.7122       |  |  |  |
| Medical Office<br>Building          | 0.18566            | 2.0000e-<br>003 | 0.0182          | 0.0153          | 1.1000e-<br>004 |                  | 1.3800e-<br>003 | 1.3800e-<br>003 |                   | 1.3800e-<br>003  | 1.3800e-<br>003 |          | 21.8424        | 21.8424        | 4.2000e-<br>004 | 4.0000e-<br>004 | 21.9753        |  |  |  |
| Parking Lot                         | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          |          | 0.0000         | 0.0000         | 0.0000          | 0.0000          | 0.0000         |  |  |  |
| Place of Worship                    | 0.0656546          | 7.1000e-<br>004 | 6.4400e-<br>003 | 5.4100e-<br>003 | 4.0000e-<br>005 |                  | 4.9000e-<br>004 | 4.9000e-<br>004 |                   | 4.9000e-<br>004  | 4.9000e-<br>004 |          | 7.7241         | 7.7241         | 1.5000e-<br>004 | 1.4000e-<br>004 | 7.7711         |  |  |  |
| Regional<br>Shopping Center         |                    | 9.7000e-<br>004 | 8.7900e-<br>003 | 7.3900e-<br>003 | 5.0000e-<br>005 |                  | 6.7000e-<br>004 | 6.7000e-<br>004 |                   | 6.7000e-<br>004  | 6.7000e-<br>004 |          | 10.5518        | 10.5518        | 2.0000e-<br>004 | 1.9000e-<br>004 | 10.6160        |  |  |  |
| Fast Food<br>Restaurant w/o         |                    | 8.6100e-<br>003 | 0.0782          | 0.0657          | 4.7000e-<br>004 |                  | 5.9500e-<br>003 | 5.9500e-<br>003 |                   | 5.9500e-<br>003  | 5.9500e-<br>003 |          | 93.8799        | 93.8799        | 1.8000e-<br>003 | 1.7200e-<br>003 | 94.4513        |  |  |  |
| Government<br>Office Building       |                    | 0.0113          | 0.1028          | 0.0863          | 6.2000e-<br>004 |                  | 7.8100e-<br>003 | 7.8100e-<br>003 |                   | 7.8100e-<br>003  | 7.8100e-<br>003 |          | 123.3038       | 123.3038       | 2.3600e-<br>003 | 2.2600e-<br>003 | 124.0542       |  |  |  |
| Total                               |                    | 0.1090          | 0.9911          | 0.8326          | 5.9500e-<br>003 |                  | 0.0753          | 0.0753          |                   | 0.0753           | 0.0753          |          | 1,189.342<br>0 | 1,189.342<br>0 | 0.0228          | 0.0218          | 1,196.580<br>1 |  |  |  |

# 6.0 Area Detail

# **6.1 Mitigation Measures Area**

|             | ROG    | NOx             | CO              | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e   |
|-------------|--------|-----------------|-----------------|--------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----|--------|
| Category    | lb/day |                 |                 |        |                  |                 |                 |                   |                  |                 |          |           | lb/d      | day             |     |        |
| Unmitigated | 6.9730 | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 |                   | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |
| Mitigated   | 6.9730 | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 | i<br>i            | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |

# 6.2 Area by SubCategory

# **Unmitigated**

|                          | ROG             | NOx             | CO                   | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5    | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e   |  |
|--------------------------|-----------------|-----------------|----------------------|--------|------------------|-----------------|-----------------|----------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----|--------|--|
| SubCategory              | lb/day          |                 |                      |        |                  |                 |                 |                      |                  |                 | lb/day   |           |           |                 |     |        |  |
| Architectural<br>Coating | 0.1061          |                 |                      |        |                  | 0.0000          | 0.0000          |                      | 0.0000           | 0.0000          |          |           | 0.0000    |                 |     | 0.0000 |  |
|                          | 6.8660          |                 | 1<br> <br> <br> <br> |        |                  | 0.0000          | 0.0000          | 1<br> <br> <br> <br> | 0.0000           | 0.0000          |          |           | 0.0000    |                 |     | 0.0000 |  |
| Landscaping              | 8.3000e-<br>004 | 8.0000e-<br>005 | 8.5500e-<br>003      | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 | 1<br> <br> <br> <br> | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |  |
| Total                    | 6.9729          | 8.0000e-<br>005 | 8.5500e-<br>003      | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 |                      | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |  |

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# 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG             | NOx             | СО              | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5    | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O | CO2e   |  |
|--------------------------|-----------------|-----------------|-----------------|--------|------------------|-----------------|-----------------|----------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----|--------|--|
| SubCategory              | lb/day          |                 |                 |        |                  |                 |                 |                      |                  |                 | lb/day   |           |           |                 |     |        |  |
| Architectural<br>Coating | 0.1061          |                 |                 |        |                  | 0.0000          | 0.0000          |                      | 0.0000           | 0.0000          |          |           | 0.0000    |                 |     | 0.0000 |  |
| Consumer<br>Products     | 6.8660          |                 |                 |        |                  | 0.0000          | 0.0000          | 1<br> <br> <br> <br> | 0.0000           | 0.0000          |          |           | 0.0000    |                 |     | 0.0000 |  |
| Landscaping              | 8.3000e-<br>004 | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 | 1<br> <br> <br> <br> | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |  |
| Total                    | 6.9729          | 8.0000e-<br>005 | 8.5500e-<br>003 | 0.0000 |                  | 3.0000e-<br>005 | 3.0000e-<br>005 |                      | 3.0000e-<br>005  | 3.0000e-<br>005 |          | 0.0179    | 0.0179    | 5.0000e-<br>005 |     | 0.0189 |  |

#### 7.0 Water Detail

# 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

# 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

# 10.0 Vegetation

# APPENDIX C TREE SURVEY AND LETTER

#### **Paul Lewis Landscape Architect**

13351-D Riverside Drive #445 Sherman Oaks, CA 91423

July 26, 2016

Mr. Marc Annotti Harridge Development Group 6363 Wilshire Blvd. Suite 600 Los Angeles, CA 90048

RE: 11147 Woodley Avenue, Granada Hills, CA 91344

Dear Marc,

This letter is in regards to the property at 11147 Woodley Avenue, Granada hills, CA 91344. On July 21, 2016, I visited the site to evaluate the native protected trees on the property.

#### **SITE HISTORY**

On the property there is currently a shopping center with multiple tenants and a sea of asphalt parking.

There are no trees that are **included in the City of Los Angeles Protected Tree Ordinance.** However there are 20 trees and 12 palms with a trunk diameter greater than 8" that are slated for removal, but will be replaced at a ratio far greater than the 1:1 requirement as the proposed plans have 225 new trees and 52 new palms.

There are seven street trees on San Fernando Mission Blvd that should be removed and replaced with matching trees. The Specific Plan calls for an allee of street trees and trees behind the sidewalk. In order to achieve this, it makes sense to remove the mixed lot of existing street trees with uniform matching trees.

#### ADJACENT PROPERTIES

No trees on adjacent properties will be impacted by construction on this site.

Should you have any questions, please feel free to contact me at 818-788-9382.

Sincerely yours,

Paul Lewis

Enclosures: Tree Report



# APPLICATION FOR A TREE REMOVAL PERMIT

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

# BUREAU OF STREET SERVICES URBAN FORESTRY DIVISION

1149 S. BROADWAY, SUITE 400, LOS ANGELES, CA 90015 TEL: 213.847.3077

|                      | (AVERAGE PROCESSING                           |  | ation #):                                  |                             |                       |  |  |  |  |
|----------------------|---|--|--|-----------------------------|-----------------------|--|--|--|--|
| Propert              | v Address:                                    |  |  |                             |                       |  |  |  |  |
| (Print               | y Address:<br>Clearly) Number                 | Street Name  | City                                       | State                       | Zip Code              |  |  |  |  |
| Propert              | y Owner's Name:                               |  |  |                             |                       |  |  |  |  |
|                      | -   | First  | Las  | t                           |                       |  |  |  |  |
| Propert              | y Owner's Contact Information                 | n:<br>Tel. No. Including Area Code   | Email                                      | Address                     |                       |  |  |  |  |
|                      |   | rei. No. ilicidaling Area Code   | Linaii A                                   | 100/633                     |                       |  |  |  |  |
| Total n              | umber of tree(s): an                          | d specific reason for tree removal   |  |                             |                       |  |  |  |  |
|                      |   | (Dan   | naged sidewalk, driveway installation, sti | reet widening, City Plannin | g condition,          |  |  |  |  |
| tree in pro          | posed foot print of the structure or dead tre | e. If it is a sewer line replacement issue, a sewer con  | nection permit from the Bureau of Public   | Works Engineering is rea    | uired.)               |  |  |  |  |
|                      | y Owner's Representative/Ag                   |  | ,  | 3 7 3 7 7                   | ,                     |  |  |  |  |
| горен                | y Owner 3 Nepresentative/Ag                   | First  |  | Last                        |                       |  |  |  |  |
|                      | Company Name:                                 |  |  |                             |                       |  |  |  |  |
|                      | Address:                                      |  |  |                             |                       |  |  |  |  |
|                      | Number  | Street Name  | City                                       | State                       | Zip Code              |  |  |  |  |
|                      | Contact Information:                          | Tel. No. Including Area Code   |  |                             |                       |  |  |  |  |
|                      |   | Tel. No. Including Area Code   | Email Ad                                   | ldress                      |                       |  |  |  |  |
| f the tr             | ee removal is approved and a                  | ny fees due have been paid, the per  | mit should be made out to:                 |                             |                       |  |  |  |  |
|                      | Name:   |  |  |                             |                       |  |  |  |  |
|                      | Email or Mailing Address: _                   |  |  |                             |                       |  |  |  |  |
|                      | This is a standard application                | n for street trees. Please complete th   | ne attached check list                     |                             |                       |  |  |  |  |
|                      | • •   | n for protected trees. Please comple   |  | nailing PTR docume          | ents, you <b>MUST</b> |  |  |  |  |
|                      | include a self-addressed stam                 | ped envelope for returns.  |  | -                           |                       |  |  |  |  |
|                      |   | a Subdivision/Land Development ca  | •  |                             | •                     |  |  |  |  |
|                      | •   | t plans, conditions of approval and fina cation. If mailing documents, you MUS   |  |                             |                       |  |  |  |  |
|                      | attached to this applit                       | ation. If mailing documents, you <b>mos</b>  | i iliciude a sell-addressed sia            | imped envelope for          | returns.              |  |  |  |  |
|                      | 2. Project title and case                     | number:  |  |                             |                       |  |  |  |  |
|                      |   | (ZA, TR  | , CPC, DIR, VAC, PM, DOT, APC)             |                             |                       |  |  |  |  |
| understa<br>understa | and that submittal of this applica            | ith the attached checklist (as indicated<br>tion does not guarantee an approval for<br>the removed tree(s) at a ratio provided | or a tree removal permit. If the           | e tree removal perr         | nit is granted, I     |  |  |  |  |
|                      | Date Pro                                      | perty Owner's Signature  | Dist                                       | Name                        |                       |  |  |  |  |

## STANDARD TREE REMOVAL APPLICATION CHECKLIST

(The following items must be attached to the application)

Rev. 06/2016

| FOR STREET TREES |   |  |  |  |  |  |  |
|------------------|---|--|--|--|--|--|--|
| 1.               | Bureau of Engineering A-permit (All driveway A-permits must include the notation "Driveway cannot be relocated"). |  |  |  |  |  |  |
| 2.               | Plot Plans – Trees to be removed <b>MUST</b> be highlighted.  |  |  |  |  |  |  |
| 3.               | Clear color photos of entire tree and/or damaged sidewalk (if repairing the sidewalk).                            |  |  |  |  |  |  |
| 4.               | Any further information that preparer of the City opines is pertinent to the project.                             |  |  |  |  |  |  |

|          |       | FOR PROTECTED PRIVATE PROPERTY TREES   |  |  |  |  |  |  |  |  |  |
|----------|-------|--|--|--|--|--|--|--|--|--|--|
| Th       | ree ( | 3) hard copies of the Protected Tree Report (PTR) shall be submitted and reviewed at the counter containing  |  |  |  |  |  |  |  |  |  |
|          |       | the following required information. (Los Angeles Municipal Code (LAMC) Section 17.02)  |  |  |  |  |  |  |  |  |  |
|          | 1.    | "Tree Expert"  |  |  |  |  |  |  |  |  |  |
|          |       | A Registered Consulting Arborist as provided by the American Society of Consulting Arborists.  |  |  |  |  |  |  |  |  |  |
|          |       | 2. A California licensed Landscape Architect who is also a Certified Arborist (CA) as provided by the International Society of   |  |  |  |  |  |  |  |  |  |
|          |       | Arboriculture (ISA).   |  |  |  |  |  |  |  |  |  |
|          |       | <ol> <li>A California licensed Pest Control Advisor who is also a Certified Arborist (CA) as provided by the International Society of<br/>Arboriculture (ISA).</li> </ol>              |  |  |  |  |  |  |  |  |  |
|          | 2.    | By whom the PTR is prepared.   3. For whom the PTR is prepared.  |  |  |  |  |  |  |  |  |  |
|          | 4.    | PTR location address with short with short geographic description.  5. Date PTR is prepared.   |  |  |  |  |  |  |  |  |  |
|          | 6.    | Date PTR field inspection.   |  |  |  |  |  |  |  |  |  |
|          | 8.    | Table of Contents.   9. Project Description and background.  |  |  |  |  |  |  |  |  |  |
|          | 10.   | Square footage of the entire property and footprint square footage of the existing and proposed new structures.  |  |  |  |  |  |  |  |  |  |
|          | 11.   | Field observations.  |  |  |  |  |  |  |  |  |  |
|          | 12.   | Findings.  |  |  |  |  |  |  |  |  |  |
|          | 13.   | Recommendations.   |  |  |  |  |  |  |  |  |  |
|          | 14.   | Trees tagged and numbered.   |  |  |  |  |  |  |  |  |  |
|          | 15.   | Mitigation (optional, <u>City of Los Angeles proscribes mitigation for any protected tree removal approval</u> ). The ordinance states   |  |  |  |  |  |  |  |  |  |
|          |       | the mitigation shall "approximate the value" of the removed trees. The current Board of Public Works policy has increased the  |  |  |  |  |  |  |  |  |  |
|          |       | minimum requirements for protected tree replacement to 4:1. The Bureau determines tree value or a group of trees in context  |  |  |  |  |  |  |  |  |  |
| _        |       | with their environment.  |  |  |  |  |  |  |  |  |  |
|          | 16.   | Protected tree construction impact guidelines.   |  |  |  |  |  |  |  |  |  |
|          | 17.   |  |  |  |  |  |  |  |  |  |  |
|          |       | that may be impacted by project number (trees to be field tagged, provide code for offsite trees, i.e. OS#1), tree species, tree   |  |  |  |  |  |  |  |  |  |
|          |       | height, diameter, spread, physical condition, (i.e. declining, drought stressed, twig dieback, etc.), suggested treatment, tree  |  |  |  |  |  |  |  |  |  |
| _        | 10    | rating, any other related information.   |  |  |  |  |  |  |  |  |  |
|          | 18.   | Matrix of proposed protected tree removals.  |  |  |  |  |  |  |  |  |  |
| $\vdash$ | 19.   | Matrix of proposed protected trees to remain.  |  |  |  |  |  |  |  |  |  |
|          | 20.   | Color photographs of all protected tree(s) (multiple trees may be shown on a photo if there is some method to differentiate between individual trees).                                 |  |  |  |  |  |  |  |  |  |
|          | 21.   | 24-inches by 36-inches Topographical map (Construction drawing) with all protected trees plotted (as close to real positions as  |  |  |  |  |  |  |  |  |  |
|          |       | possible, survey not required). Trees shall be color-coded, either highlighted or CAD as follows: Quercus spp (yellow), Platanus   |  |  |  |  |  |  |  |  |  |
|          |       | racemose (blue), Umbellularia californica (green), Juglans californica (orange). All proposed protected tree removals shall be   |  |  |  |  |  |  |  |  |  |
|          |       | circled in red. Approximate canopy spread should also be included. Included on the plan shall be the footprint of any proposed   |  |  |  |  |  |  |  |  |  |
|          | 00    | buildings, walls, patios, pools, etc. Also, to be included on plan is lot and proposed building(s) square footage.   |  |  |  |  |  |  |  |  |  |
|          | 22.   | Landscape plan showing locations of all replacement trees on a 4:1 basis with the tree stock size to be determined by the City. This plan shall be species color coded as per item 21. |  |  |  |  |  |  |  |  |  |
|          | 23.   | Verification of current licenses and certifications.   |  |  |  |  |  |  |  |  |  |
|          | 24.   | Any further information that preparer or the City opines is pertinent to the project.  |  |  |  |  |  |  |  |  |  |
|          | 25.   | Arborist's opinion whether naturally occurring or planted.   |  |  |  |  |  |  |  |  |  |
|          | 26.   | Pictures of protective fencing around the trees to be protected in place.  |  |  |  |  |  |  |  |  |  |
|          | 27.   |  |  |  |  |  |  |  |  |  |  |
|          | 28.   | Must be in a 3-ring binder if large amount of pages.   |  |  |  |  |  |  |  |  |  |
|          | 29.   |  |  |  |  |  |  |  |  |  |  |
|          | 30    | Digital copy of all submissions.   |  |  |  |  |  |  |  |  |  |

#### Protected Tree Report [PTR] for 11147 Woodley Avenue, Granada Hills, CA 91344

1-"Tree Expert" as per Los Angeles Municipal Code (LAMC) Section 17.02 **Tree Expert** – A person with at least four years of experience in the business of transplanting, moving, caring for and maintaining trees and who is (a) a certified arborist with the International Society of Arboriculture and who holds a valid California license as an agricultural pest control advisor or (b) a landscape architect or (c) a registered consulting arborist with the American Society of Consulting Arborists. (Amended by Ord. No. 177,404, Eff. 4/23/06.)

Paul A. Lewis, Landscape Architect, #3620 exp. 2/28/17

2-By whom the PTR is prepared: Paul Lewis

3-For whom the PTR is prepared: Harridge Development Group

4-PTR location address with short geographic description:

11147 Woodley Avenue is a 7.95 acre site on the NW corner of Woodley Avenue and San Fernando Mission Blvd. The site currently is a retail center with multiple tenants and a sea of asphalt. The site slopes at approximately 2%-5% from north to south and is located on the alluvial plane of the Santa Susana Mountains.

- 5- Date PTR is prepared: July 26, 2016.
- 6- Date of PTR field inspection: July 21, 2016.
- 7- PTR purpose: to review tree inventory on this property to clear condition on permit application for a new mixed use retail and residential project.

#### 8 - Table of Contents

| Standard Tree Removal Application Checklist information | pages | 1-2  |
|---|-------|------|
| Matrix summarizing observations                         | page  | 3-5  |
| Color photographs                                       | pages | 6-14 |
| Site map locating trees                                 | page  | 15   |
| Landscape plan  | page  | 16   |

9 - Project description and background: On the property there is currently a one-story home. There is a current plan remodel the residence, however the Grading Division has requested that the owner stabilize the slope on the south portion of the site due to the exposed bedding plains that were a result of the site development in the 1940s/1950s when the lot was first cut from the slope.

10 – Square footages:

| Entire Property:           | 346,245 SF |
|----------------------------|------------|
| Existing Structures:       | 133,629 SF |
| Proposed Project Footprint | 185,880 SF |

# Protected Tree Report [PTR] for 11147 Woodley Avenue, Granada Hills, CA 91344 page 2

- 11 Field observations: Noted on Matrix. There is irrigation for most of the trees on site and the most of the trees are in a relatively healthy state. However a number of trees are starting to show signs of stress due to the drought and watering cutbacks in an effort to conserve water.
- 12 Findings: None of the trees are native to the site and once replaced the greater number of new trees will provide a far greater tree shade canopy over the site.
- 13 Recommendations: N/A
- 14 Trees tagged and numbered: No trees were tagged.
- 15 Mitigation: For trees being removed with trunk diameter greater than 8" a 1:1 ratio replacement is required.
- 16 Protected tree construction impact guidelines: N/A
- 17, 18, 19 Matrix: see page 3-5
- 20 Color photographs: see page 6-14
- 21 Topographical map: see page 15
- 22 Landscape plan: see page 16
- 23 Verification of current license: Active and in good standing. http://www.latc.ca.gov/consumers/licensee\_name.pdf
- 24 Misc. opines: none.
- 25 No trees are naturally occurring on this site.
- 26 Photos of protective fencing: N/A
- 27 Reason for removal: Trees are within area of construction of the new development.
- 28 3 ring binder not necessary, less than 20 pages
- 29 CEQA documents: City Planning Department Letter of Determination pending
- 30 Electronic copy

Project Address 11147 WODDLEY WE

Date 1/2/1

40 6 TREE# TAGGED [Y/N] SINGUINING SAC Project Address BUNUS COMPARADO TO MA reme rome to mae ORT. PANIA CONSTITUTION OF S PACE PEZ De LES BOOM LA 3703 32 55 B X P APPEARANCE 8 30 R 8 X 5 B HEALTH 2 0 MEASUREMENTS: 0 3 000 0 00 B Ø 00 8 6 ク 00 E E E CO Height 12101 2014 2 30 5 6 00 5 2 3 K 不 30 10 Canopy [w] 3 8 Q, 50 0 00 20 0 = 0. B 5 3 Diam of Trunk Z No. of Trunks VIGOR: Chlorosis Deadwood Mainstern Dieback(Major) Thinning of Crown Twig Dieback (Minor) Wilt DISEASES: Inspector Cankers 9 Exfoliation Exudations Marg. Leaf Scorch ENVIRONMENT: Poor Drainage Soil Build-up Undermining Erosion STRUCTURE: Broken Branches Cavit. - Branch Cavit - Trunk Decay/Rot Excess Horiz. Growth Hazardous Conditions Lopsided Canopy Low Branching Mechanical Injury

0

2

Poor Pruning
Roots Exposed
Sharp Branch Angle
Tom Branch Scars

Water Trap

Wire/Nails PESTS:

Borers/Termites
Galls
Girdles
Oak Moth
Pit-Scale
Plant Parasites
Witches Broom
Woodpeckers

Ants

Bees

~

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PROTECTED FREUS VISITA Ber mEES IN PURCE - UMITS ANA SCISTRO きが OF PROJECT Scare OF E mens PROJECT NOT CUBILLY AT THE OF 4 much 3

| 20 | 19 | 18 | 17      | 4            | 4        | A        | 4           | S       | A             | 4             | 20          | 8    | 4          | 6    | 15   | 1   | 1 5      | 100      | 4      | TREE#  |
|----|----|----|---------|--------------|----------|----------|-------------|---------|---------------|---------------|-------------|------|------------|------|------|-----|----------|----------|--------|--|
| °  |    |    | 7       | o,           | 01       | 14       | ω           | 1       |               |               |             | w    |            | 0,   |      |     |          |          |        | TAGGED [Y/N]   |
|    |    |    | Care    | WAS HY       | TAIL Y   | E S      | 610         | EUC 513 | THE REPORT OF | PLAN          | CUP         | かっ   | enc        | enc  | OHP. | CAR | A S      | 1        | 00     | SPECIES  |
|    |    |    | MAXJET, | Was Hustonly |          | Rus      | CIS         | 505     | PLOYEUN COLE  | PLATEN STOCKE | ALLA        | MAR  | 510        | 015  | 44   | A A | *        | Part -   | STOR S |  |
|    |    |    |         | X            | R        | R<br>R   | 200         | 89      | 98            | P             | 53          | 88   | 50         | 8    |      |     | <u> </u> | SQ<br>PQ | S Sx   | APPEARANCE HEALTH MEASUREMENTS:  |
|    |    |    |         | 488 18.1     | 1000 101 | 1 412196 | 1,2150      | ススでし    | 150 1825      | 3624 19 1     | 10 16 810 1 | 1818 | 1,20,53,53 | 公安了一 | 25   | *   | 100131   | 12000    | 1500   | Height Canopy [w] Diam. of Trunk No. of Trunks VIGOR:                                |
|    |    |    |         |              |          |          | \<br>\<br>\ | 1/1     |               |               |             |      | 1          |      |      |     |          |          |        | Chlorosis Deadwood Mainstem Dieback(Majo Thinning of Crown Twig Dieback (Minor) Wilt |
|    |    |    |         |              |          |          | 1           | V V     | 7 7           | V V/          | 1/          | V    | 1//        | V V, |      |     | <u>«</u> |          |        | DISEASES:  Cankers  Exfoliation  Exudations  Marg. Leaf Scorch  ENVIRONMENT:         |
|    |    |    |         |              |          |          |             |         |               |               |             |      |            |      |      |     |          |          |        | Poor Drainage<br>Soil Build-up<br>Undermining Erosion                                |
|    |    |    |         |              |          |          |             |         |               |               |             |      |            |      |      |     |          |          |        | Broken Branches Cavit Branch Cavit Trunk Decay/Rot Excess Horiz. Growth              |
|    |    |    |         |              |          |          |             |         |               |               |             |      | <          | ٩    |      | -   |          |          |        | Hazardous Conditions Lopsided Canopy Low Branching Mechanical Injury                 |
| -  |    |    |         |              |          |          | V           | _       |               | <             | 8           |      | V          | 101  |      |     |          |          |        | Poor Pruning Roots Exposed Sharp Branch Angle Tom Branch Scars                       |
|    |    |    |         |              |          |          |             |         |               |               |             | \    |            |      |      |     |          |          |        | Water Trap Wire/Nails PESTS: Ants  |
| +  |    |    |         |              |          |          |             |         |               |               |             |      |            |      |      |     |          |          |        | Bees Borers/Termites Galls Girdles Oak Moth  |
|    |    |    |         |              |          |          |             |         |               |               |             |      |            |      |      |     |          |          |        | Pit-Scale Plant Parasites Witches Broom Woodpeckers                                  |





2 Lagertroemia indica – STREET TREE



3 Lagertroemia indica – STREET TREE



4 Lagertroemia indica – STREET TREE



5 Lagertroemia indica – STREET TREE



6 Lagertroemia indica – STREET TREE



7 Lagertroemia indica – STREET TREE



8 Eucalyptus sideroxylon



9 Ficus nitida





11&12 Syagrus romanzoffianum



13 Syagrus romanzoffianum



14 Syagrus romanzoffianum





15 Ficus macrocarpa

16 Ficus macrocarpa



17 Syagrus romanzoffianum



18 Lagerstroemia indica



19 Syagrus romanzoffianum



20 Syagrus romanzoffianum



21 Syagrus romanzoffianum



## 11147 Woodley Avenue TREE IMAGERY

22 Ficus macrocarpa





24 Ficus macrocarpa



25 Alnus cordata



26 Ficus macrocarpa



27 Syagrus romanzoffianum



28&29 Syagrus romanzoffianum



30 Cupania anacardioides



31 Syagrus romanzoffianum



46 Eucalyptus sideroxylon



48 Ficus macrocarpa



49 Cupania anacardioides



50&51 Platanus acerfolia



52 Eucalyptus sideroxylon



53 Eucalyptus sideroxylon



54&55 Washingtonia robusta 56 Washingtonia cellurifera v.'Nextel'







#### PLANTING LEGEND



#### **TREES**







Cercidium 'Desert Museum' / Hymenosporum flavidum / Sweet shade





Koelreuterla bipinnata / Chinese Flame tree





Olea europaea 'Swan HIII' / Frultless olive









Tristania conferta / Brisbane Box





16004

Harridge Development Group 6363 Wilshire Boulevard, Suite 600 Los Angeles, CA 90048

#### WOODLEY & SAN FERNANDO MISSION

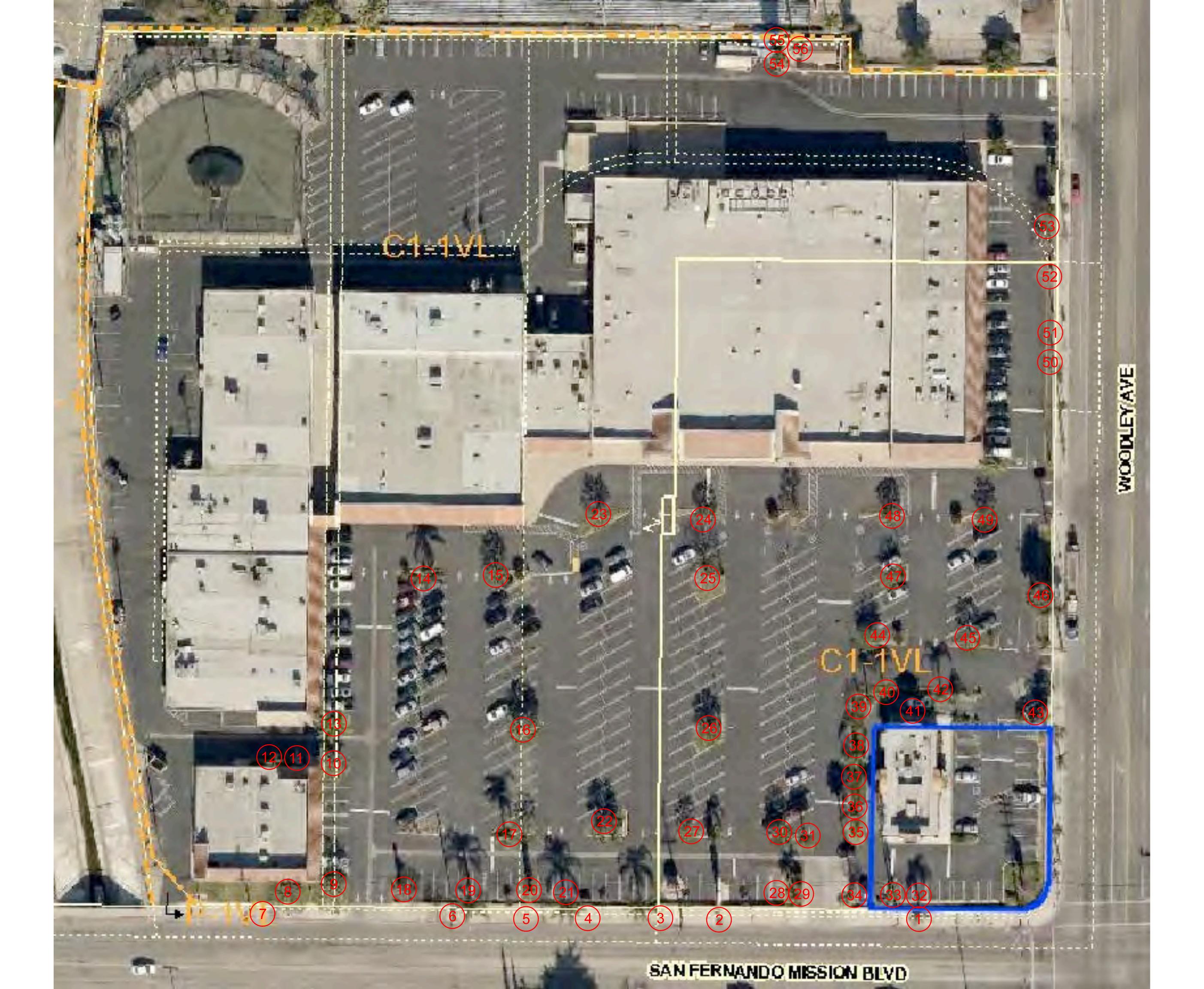
11147 N WOODLEY AVE & 16201-16301 W SAN FERNANDO MISSION BLVD LOS ANGELES, CA 91344



PAUL LEWIS & ASSOCIATES LANDSCAPE ARCHITECTURE T: 818-788-9382 F: 818-788-3217

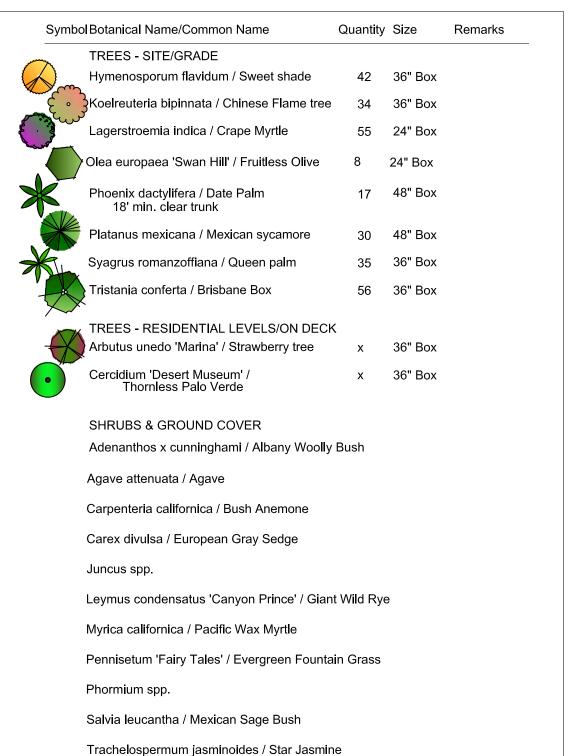


VAN TILBURG, BANVARD & SODERBERGH, AIA



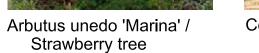


## PLANTING LEGEND



## **TREES**







Thornless Palo Verde



Cercidium 'Desert Museum' / Hymenosporum flavidum / Sweet shade



Koelreuteria bipinnata / Chinese Flame tree



Lagerstroemia indica / Crape Myrtle



Olea europaea 'Swan Hill' / Fruitless olive



Phoenix dactylifera / Date Palm



Mexican sycamore

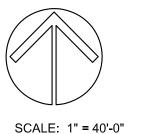


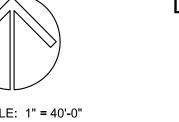
Syagrus romanzoffiana / Queen Palm



Brisbane Box

Tristania conferta /





LANDSCAPE PLAN -SITE/GRADE

16004

PREPARED FOR: Harridge Development Group 6363 Wilshire Boulevard, Suite 600 Los Angeles, CA 90048

# WOODLEY & SAN FERNANDO MISSION

#### **APPENDIX D**

# APPROVAL LETTER (OF THE GEOTECHNICAL INVESTIGATION) FROM THE CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY

## **GEOTECHNICAL INVESTIGATION**

# CITY OF LOS ANGELES INTER-DEPARTMENTAL CORRESPONDENCE

#### GEOLOGY AND SOILS REPORT APPROVAL LETTER

September 8, 2016

LOG # 94463

SOILS/GEOLOGY FILE - 2

To:

Jim Tokunaga, Deputy Advisory Agency

Department of City Planning

200 N. Spring Street, 7th Floor, Room 750

From:

Pascal Challita, Grading Division Chief

Department of Building and Safety

Proposed Tentative Tract:

VTT-74392, 1 lot with 440 condominium units

Current Legal:

PM 730, Lot FR A | TR 21327, Lots FR 1 (Arbs. 1, 2 and 4)

Location:

16225 W. San Fernando Mission Boulevard (aka 16201 W. San Fernando

Mission Boulevard, 11147 N. Woodley Avenue)

| CURRENT REFERENCE      | REPORT     | DATE OF         |                              |
|------------------------|------------|-----------------|------------------------------|
| REPORT/LETTER(S)       | <u>No.</u> | <b>DOCUMENT</b> | PREPARED BY                  |
| Geology/Soils Report   | 1732-64    | 04/01/2016      | Feffer Geological Consulting |
| Oversized Documents    | **         | **              | **                           |
| Laboratory Test Report | SL16.2137  | 03/04/2016      | Soil Labworks, LLC           |

The Grading Division of the Department of Building and Safety has reviewed the Tentative Tract VTT-74392 with Los Angeles Department of City Planning receipt stamp dated 08/18/2016 and the referenced reports that provide recommendations for the proposed demolition of all existing site structures and construction of three, 4-story mixed use buildings (1 level retail with 3 levels apartments) and one, 7-story mixed use building (3-story subterranean parking with 4-story apartments) with basement retaining walls and temporary shoring tie-backs. The earth materials at the subsurface exploration locations consist of up to 6 feet of uncertified fill underlain by alluvium. The consultants recommend to support the proposed structures on conventional foundations bearing on native undisturbed soils and/or a blanket of properly placed fill a minimum of 3 feet below proposed building foundation.

The Tentative Tract VTT-74392 and the referenced reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis () refer to applicable sections of the 2014 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

- 1. All recommendations of the report by Feffer Geological Consulting dated 04/01/2016 signed by Dan Daneshfar, RCE 68377, and Joshua R. Feffer, CEG 2138, which are in addition to or more restrictive than the conditions contained herein shall also be incorporated into the plans for the project. (7006.1)
- 2. The entire site shall be brought up to the current Code standard (7005.9).

16225 W. San Fernando Mission Boulevard (aka 16201 W. San Fernando Mission Boulevard, 11147 N. Woodley Avenue)

- 3. Provide a notarized letter from all adjoining property owners allowing tie-back anchors on their property. (7006.6)
- 4. The geologist and soils engineer shall review and approve the detailed plans prior to issuance of any permits. This approval shall be by signature on the plans that clearly indicates the geologist and soils engineer have reviewed the plans prepared by the design engineer and that the plans include the recommendations contained in their reports. (7006.1)
- 5. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1)
- 6. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2)
- 7. Prior to the issuance of any permit, an accurate volume determination shall be made and included in the final plans, with regard to the amount of earth material to be exported from the site. For grading involving import or export of more than 1000 cubic yards of earth materials within the grading hillside area, approval is required by the Board of Building and Safety. Application for approval of the haul route must be filed with the Board of Building and Safety Commission Office. Processing time for application is approximately 8 weeks to hearing plus 10-day appeal period.
- 8. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code. (7011.3)
- 9. If import soils are used, no footings shall be poured until the soils engineer has submitted a compaction report containing in-place shear test data and settlement data to the Grading Division of the Department, and obtained approval. (7008.2)
- 10. Compacted fill shall extend beyond the footings a minimum distance equal to the depth of the fill below the bottom of footings or a minimum of five feet (as recommended) whichever is greater. (7011.3)
- 11. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (1809.2, 7011.3)
- 12. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction. (7013.12)
- 13. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)

16225 W. San Fernando Mission Boulevard (aka 16201 W. San Fernando Mission Boulevard, 11147 N. Woodley Avenue)

- 14. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring, as recommended. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)
- 15. Prior to the issuance of any permit which authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation. (3307.1)
- 16. The soils engineer shall review and approve the shoring and/or underpinning plans prior to issuance of the permit. (3307.3.2)
- 17. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.
- 18. Unsurcharged temporary excavation may be cut vertical up to 5 feet. For excavations over 5 feet, the lower 5 feet may be cut vertically and the portion of the excavation above 5 feet shall be trimmed back at a gradient not exceeding 1:1 (horizontal to vertical), as recommended.
- 19. Shoring shall be designed for a minimum EFP of 35 PCF, which includes the surcharge from temporary traffic loads; all other surcharge loads shall be included into the design, as recommended.
- 20. Shoring shall be designed for a maximum lateral deflection of 1 inch, provided there are no structures within a 1:1 plane projected up from the base of the excavation. Where a structure is within a 1:1 plane projected up from the base of the excavation, shoring shall be designed for a maximum lateral deflection of ½ inch, or to a lower deflection determined by the consultant that does not present any potential hazard to the adjacent structure.
- 21. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.
- 22. All foundations shall derive entire support from native undisturbed soils, a blanket of properly placed fill a minimum of 3 feet below proposed foundation, as recommended and approved by the soils engineer by inspection.
- 23. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4) ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top.
- 24. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2014-116 "Foundation Design for Expansive Soils" (1803.5.3).

16225 W. San Fernando Mission Boulevard (aka 16201 W. San Fernando Mission Boulevard, 11147 N. Woodley Avenue)

- 25. Slabs placed on approved compacted fill shall be at least 5 inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way.
- 26. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 5 inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way.
- 27. The seismic design shall be based on a Site Class D, as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check.
- 28. Retaining walls shall be designed for the lateral earth pressures specified in the section titled "5.6 Retaining Walls" starting on page 16 of the 04/01/2016 report. All surcharge loads shall be included into the design.
- 29. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device. (7013.11)
- 30. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soil report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record. (1805.4)
- 31. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (108.9)
- 32. Basement walls and floors shall be waterproofed/damp-proofed with an L.A. City approved "Below-grade" waterproofing/damp-proofing material with a research report number. (104.2.6)
- 33. Prefabricated drainage composites (Miradrain, Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.
- 34. The structures shall be connected to the public sewer system. P/BC 2014-027
- 35. All roof and pad drainage shall be conducted to the street in an acceptable manner. (7013.10)
- 36. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS. (7013.10)
- 37. Any recommendations prepared by the geologist and/or the soils engineer for correction of geological hazards found during grading shall be submitted to the Grading Division of the Department for approval prior to utilization in the field. (7008.2, 7008.3)
- 38. The geologist and soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading. (7008 & 1705.6)

- 39. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)
- 40. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of construction, shoring, underpinning, protection fences and dust and traffic control will be scheduled. (108.9.1)
- 41. Installation of shoring, underpinning, slot cutting excavations and/or pile installation shall be performed under the inspection and approval of the soils engineer and deputy grading inspector. (1705.6)
- 42. The installation and testing of tie-back anchors shall comply with the recommendations included in the report or the standard sheets titled "Requirement for Tie-back Earth Anchors", whatever is more restrictive. (Research Report #23835)
- 43. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the LADBS Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included. (7011.3)
- 44. No footing/slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.

CLI/DLS:clj/dls Log No. 94463 213-482-0480

cc: Ricky Gelb, Owner
Erika Iverson, Rosenheim & Associates (erika@raa-inc.com), Applicant
Feffer Geological Consulting, Project Consultant
Soil Labworks, LLC, Project Consultant
VN District Office



April 1, 2016 File No: 1732-64

Marc Annotti Harridge Development Group, LLC 6363 Wilshire Blvd., Suite 600 Los Angeles, CA 90048

Subject: **GEOTECHNICAL INVESTIGATION** 

Proposed Mixed Use Buildings With On Grade And Three Levels of Subterranean Parking

16225 W. San Fernando Mission Boulevard, Los Angeles, CA 91344

Dear Mr. Annotti,

As requested, Feffer Geological Consultants performed a geotechnical investigation at the subject site. The purpose of this investigation was to evaluate the geotechnical conditions at the site in the areas of the proposed construction and to provide geotechnical parameters for design and construction.

Based on our investigation, it is our opinion that the proposed construction is feasible from a geotechnical standpoint provided the recommendations contained herein are incorporated into the project plans and specifications. This report should be reviewed in detail prior to proceeding further with the planned development. When final plans for the proposed construction become available, they should be forwarded to this office for review and comment.

We appreciate the opportunity to be of service. Should you have any questions regarding the information contained in this report, please do not hesitate to contact us.

Sincerely,

FEFFER GEOLOGICAL CONSULTING, INC.

Joshua R. Feffer

Principal Geologist

Distribution: Addressee–(1)

F

Dan Daneshfar

P.E. 68377

Principal Engineer

#### 1.0 <u>INTRODUCTION</u>

#### 1.1 PURPOSE

The purpose of this investigation was to evaluate the existing geotechnical conditions at the subject site and to provide design and construction criteria for the proposed mixed use development.

#### 1.2 SCOPE OF SERVICES

The scope of work performed during this investigation involved the following;

- Research and review of available pertinent geotechnical literature;
- Subsurface exploration consisting of the drilling of five borings (B1, B2, B3, B4, B5);
- Sampling and logging of the subsurface soils;
- Laboratory testing of selected soil samples collected from the subsurface exploration to determine the engineering properties of the underlying earth materials;
- Engineering and geologic analysis of the field and laboratory data; and
- Preparation of this report presenting our findings, conclusions, and recommendations for the proposed construction.

#### 1.3 SITE DESCRIPTION

The project site is located on the northwest corner of the intersection of N. Woodley Avenue and W. San Fernando Mission Boulevard in the San Fernando area of the City of Los Angeles CA (Figure 1). The subject lot is located on a relatively level pad (Figure 2). The subject site is occupied by three existing buildings, an associated parking lot, and is surrounded by residential and commercial developments. Immediately west of the project site the Bull Creek Flood Control drainage canal flows south. Surface drainage is by sheet flow to the south and east to the adjacent streets.

#### 1.4 PROPOSED CONSTRUCTION

Based on the information provided to us, the project will consist of demolishing the existing buildings (with the exception of the Taco Bell pad restaurant) and the construction of a new four-story apartment building over three levels of subterranean parking and an additional on grade four-story apartment building over one level of retail. A Site Plan and Cross Sections showing the proposed development are included in Appendix C.

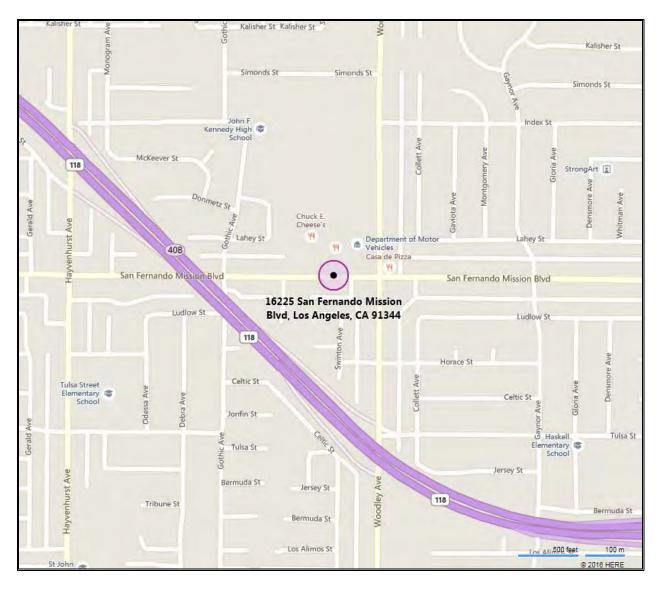


Figure 1. Location map of the site.



Figure 2. Aerial Photographic with Topographic overlay from Navigate LA. Location is designated by a yellow outline and star.

#### 1.5 <u>DOCUMENT REVIEW</u>

The City of Los Angeles Building Department records were researched. The subject property is comprised of multiple addresses. The following reports were obtained for the subject property.

#### 16201 San Fernando Mission Boulevard

Update Soils Engineering Report for Proposed Building, Granada Hills Plaza, 16201 San Fernando Mission Boulevard, Granada Hills, California, by Foundation Engineering Company Inc. (FECI), Dated May 22, 1986. FECI performed an investigation for a one-story building and drilled six borings to depths of up to 35 feet. Prior to this report FECI also issued prior geotechnical reports for the property on the following dates:

August 12, 1980 Soils Engineering Report
January 20, 1981 Addendum to Soils Engineering Report
March 25, 1981 Report on Compacted Fill
November 30, 1981 Supplemental Report on Compacted Fill

FECI recommended that conventional shallow spread foundation be supported on new compacted fill or existing competent alluvium. The City of Los Angeles issued an Approval Letter on March 30, 1981.

On June 19, 1986 FECI submitted a Second Supplemental Report on Compacted Fill, and an additional Third Supplemental Report on Compacted Fill on August 17, 1987 for placement of compacted fill for support of foundations. On August 24, 1987 the City of Los Angeles issued an Approval Letter for the compaction reports. On January 13, 1994, the City of Los Angeles issued a Grading Certificate

Compaction Report for Proposed Loading Dock Backfill, 16201 San Fernando Mission Blvd., PM 730, Lot A, North Hills, California by GeoConcepts Inc. (GCI), Dated August 25, 2014. GCI conducted a compaction test on a northern portion of the project site and concluded that the approved fill found on site was suitable as a secondary structural fill to support the proposed construction. On September 2, 2014, the City of Los Angeles issued an Approval Letter (LOG #85438).

#### 16231 San Fernando Mission Boulevard

Geotechnical Engineering Study Report for Proposed Nextel Communication Telecommunication Facility at 16231 San Fernando Mission Boulevard, Granada Hills, California by Geotechnical Solutions, Inc. (GSI), Dated March 10, 2004. GSI performed an investigation for a 62-foot high cellular communications tower to be built on the northeastern corner of the property. GSI drilled one boring to a depth of up to 36.5 feet. GSI observed a lack of significant fill at the boring location, and found the underlying natural alluvium to consist primarily of fine silty, slightly clayey sands with layers of gravel interbedded. GSI concluded the proposed site to be suitable for construction. On February 25, 2005, GSI issued an addendum statement to their original report, confirming that the project site did not lie within a

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liquefaction hazard area. On March 17, 2005, the City of Los Angeles issued an Approval Letter (LOG # 46870-01).

#### 16275 San Fernando Mission Boulevard

Geotechnical Investigation for Proposed Cellular Communication Tower at Woodley Avenue and San Fernando Mission Blvd., Granada Hills, California by Stoney-Miller Consultants, Inc. (SMCI), Dated July 17, 1989. SMCI drilled a single boring to a depth of 41.5 feet and found site conditions suitable for the proposed construction of a 60-foot high cellular communications tower. On December 12, 1989, the City of Los Angeles issued a Conditional Approval Letter

#### 2.0 <u>INVESTIGATION</u>

#### 2.1 GENERAL

Our field investigation was performed on February 22, 2016 and consisted of a review of site conditions and exploration involving the drilling of five borings and soil sampling. Our investigation also included laboratory testing of selected soil samples. A brief summary of these various tasks are provided below.

#### 2.2 <u>FIELD EXPLORATION</u>

The subsurface investigation performed at the site consisted of drilling five borings with a 8" diameter hollow-stem auger drill rig. The purpose of the exploratory boring was to determine the existing subsurface conditions and to collect subsurface soil in the areas of the proposed construction and throughout the site.

The borings were drilled to a maximum depth of 31.5' below the existing ground surface.

The soil materials encountered in the borings consisted of fill over alluvium; the fill was typically less than three feet in thickness with one locally deeper area to a depth of six feet.

A review of geological maps indicates that the material underlying the subject site is comprised of Alluvium (Qa) of Quaternary age (Figure 4).

The borings were logged by our field geologist using both visual and tactile means. Both bulk and relatively undisturbed soil samples were obtained.

The approximate locations of the Borings are shown on the attached Site Plan included in Appendix C. Detailed boring logs are presented in Appendix A.

#### 2.3 <u>LABORATORY TESTING</u>

Laboratory testing was performed on representative samples obtained during our field exploration. Samples were tested for the purpose of estimating material properties for use in subsequent engineering evaluations. Testing included in-place moisture and density, hydroresponse-swell/collapse, maximum density and shear strength testing. A summary of the laboratory test results is included in Appendix B.

The physical properties of the soils were tested at Soil Labworks, LLC. The undersigned geologist and engineer have reviewed the data, concur, and accept responsibility for the data therein.

#### 3.0 <u>SITE GEOLOGY, SEISMICITY, POTENTIAL HAZARDS</u>

#### 3.1 <u>SITE GEOLOGY</u>

Regional Geologic Maps<sup>1</sup>, and the subsurface exploration indicated that the property is underlain by Quaternary Age Alluvium (Qa) (Figure 4) overlain by a veneer of fill. Descriptions of the materials encountered in our exploratory borings are described below.

#### 3.1.1 Fill

The fill consists of silty sand. The color is mottled dark brown and dark green. The fill is moist and medium dense. The fill encountered is as deep as six feet below the ground surface

#### 3.1.2 Alluvium

The Alluvium consists of admixtures of sands, silts clays and gravel, which varies in color from tan brown, light brown, orange brown, gray brown. The Alluvium was moist and medium dense to dense. The Alluvium is generally weakly horizontally layered with no significant structural planes. Generally, the Alluvium becomes more granular with depth.

#### 3.1.3 Groundwater

Groundwater was not encountered during exploration. This area of Los Angeles lies in an area where the nearest contours show a historical groundwater depth of 190 feet below the ground surface (Plate 1.2, Historically Highest Groundwater Contours and Borehole Log Data Locations, San Fernando 7½ Minute Quadrangle in Seismic Hazard Zone Report for the San Fernando 7.5-Minute Quadrangle, SHZR-015).

<sup>1</sup> Dibblee, T.W., and Ehrenspeck, H.E., ed.: 1991, Geologic Map of the San Fernando and Van Nuys (north ½) quadrangles, Los Angeles County, California, Dibblee Foundation Map, DF #33.

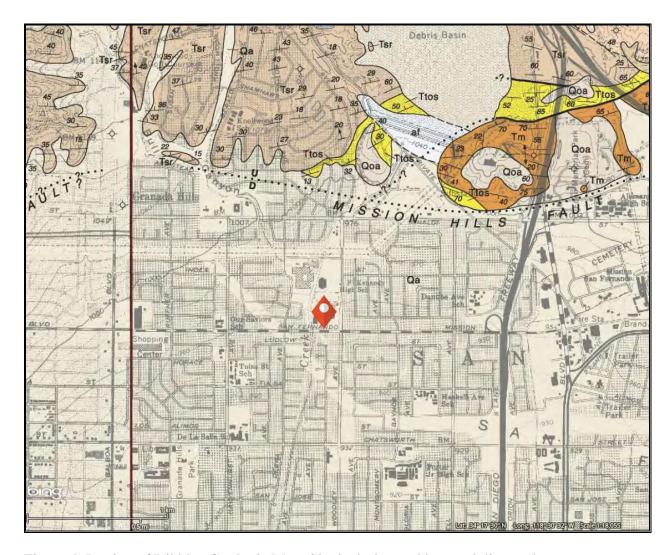


Figure 4. Portion of Dibblee Geologic Map. Site is designated by a red diamond.

# 3.2 **SEISMICITY**

A risk common to all areas of Southern California that should not be overlooked is the potential for damage resulting from seismic events (earthquakes). The site is located within a seismically active area, as is all of Southern California. Although we are not aware of any active faults on or within the immediate vicinity of the site, earthquakes generated on large regional faults such as the San Andreas Fault could affect the site.

The closest known potentially active fault to the site is the Mission Hills Fault, which is the part of the Sierra Madre (San Fernando) Fault system, located approximately one kilometer to the north. Since no active faults cross the property, the surface rupture hazard at the site is very low.

Due to the distance from the coastline the site is not susceptible to the effects of tsunamis and seiches.

As discussed below, the subject site is **NOT** located in an area designated being within an area that is potentially affected by earthquake-induced liquefaction, *landsliding or an Alquist Priolo Zone* (Seismic Hazard Zones-Earthquake Fault Zones Hollywood Quadrangle, Los Angeles County, California, 1999-2014).

# 3.3 2014 LOS ANGLES BUILDING CODE CONSIDERATIONS

The proposed development may be designed in accordance with seismic considerations contained in the 2014 Los Angeles Building Code, Section 1613, the following parameters may be considered for design:

Mapped Spectral Response Acceleration Parameters:

| -                  | $S_{S}$          | : | 2.335g |
|--------------------|------------------|---|--------|
|                    | $\mathbf{S}_{1}$ | : | 0.866g |
| Site Class:        | D                | : | Soil   |
| Site Coefficients: | $F_a$            | : | 1.0    |
|                    | F.,              |   | 1.5    |

Maximum Considered Earthquake Spectral Response Acceleration Parameters:

| $S_{MS}$ | : | 2.335g |
|----------|---|--------|
| $S_{M1}$ | : | 1.300g |

Design Spectral Response Acceleration Parameters:

PGAm = 0.875 g

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# 4.0 <u>GEOTECHNICAL CONSIDERATIONS</u>

# 4.1 SUBSURFACE SOIL CONDITIONS

Subsurface materials at the site consist of Alluvium below a layer of fill three to six feet in thickness. Laboratory testing indicates that the Alluvium at a shallow depth has a low potential for consolidation and hydrocollapse. The Alluvium at the subject site is competent and capable of supporting engineered structures and appurtenances. The following paragraph provides general discussions about settlement and expansive soil activity.

# 4.2 SETTLEMENT

Our investigation indicated that the consolidation and hydrocollapse potential of the Alluvium at the depth of the proposed construction is low. The in-situ dry densities are high for the samples taken at the foundation level and it is our experience that these soils have a very low potential for consolidation. Recommendations are presented below to mitigate the settlement hazard associated with consolidation of the near surface soils.

# 4.3 EXPANSIVE SOIL

The on-site, near surface soil was found to possess medium expansive characteristics based upon field soil classifications and testing.

# 4.4 **SLOPE STABILITY**

There are no significant slopes on the subject site.

The property has less than five feet of overall elevation change across the site; no appreciable slopes exist on the site. A slope stability analysis is not required for the property per City of Los Angeles Department of Building and Safety Information Bulletin P/BC 2011-49.

# 5.0 <u>CONCLUSIONS AND RECOMMENDATIONS</u>

# **5.1 BASIS**

Conclusions and recommendations contained in this report are based upon information provided, information gathered, laboratory testing, engineering and geologic evaluations, experience, and judgment. Recommendations contained herein should be considered minimums consistent with industry practice. More rigorous criteria could be adopted if lower risk of future problems is desired. Where alternatives are presented, regardless of what approach is taken, some risk will remain, as is always the case. Usually the lowest risk is associated with the greatest cost.

# 5.2 SITE SUITABILITY

The site is within an area including completed housing and building developments. Geotechnical exploration, analyses, experience, and judgment result in the conclusion that the proposed development is suitable from a geotechnical standpoint.

It is our opinion that the site can be improved without hazard of landslide, slippage, or settlement, and improvement can occur without similar adverse impact on adjoining properties. Realizing this expectation will require adherence to good construction practice, agency and code requirements, the recommendations in this report, and possible addendum recommendations made after plan review and at the time of construction.

It should be realized that the purpose of the seismic design utilizing the above parameters is to safeguard against major structural failures and loss of life, but not to prevent damage altogether. Even if the structural engineer provides designs in accordance with the applicable codes for seismic design, the possibility of damage cannot be ruled out if moderate to strong shaking occurs as a result of a large earthquake. This is the case for essentially all structures in Southern California.

# 5.4 <u>EARTHWORK</u>

# 5.4.1 General

If the proposed construction will require grading of the site; it should be done in accordance with good construction practice, minimum code requirements and recommendations to follow. Grading criteria are included within Appendix D.

# 5.4.2 Site Preparation and Grading

Based on our understanding of the proposed development, we recommend that footings be founded in firm Alluvium for the subterranean parking levels and future compacted fill that extends a minimum of three feet below footings and five feet outside of the building footprint for the on-grade structures. Prior to the start of grading operations, utility lines within the project area, if any, should be located and marked in the field so they can be rerouted or protected during site development. All debris and perishable material should be removed from the site. Although currently not anticipated, all permanent cut and fill slopes should not be constructed steeper than 2:1.

If fill is to be placed the upper six to eight inches of surface exposed by the excavation should be scarified; moisture conditioned to two to four percent over optimum moisture content, and compacted to 90 percent relative compaction<sup>2</sup>. If localized areas of relatively loose soils prevent proper compaction, over-excavation and re-compaction will be necessary.

# **5.4.3** Excavation Characteristics

The borings did not encounter hard earth materials. Difficult excavation conditions are not anticipated. However, loose layers of sand may be encountered that will potentially cave during excavation.

### 5.4.4 Groundwater

Groundwater was not encountered during the recent excavations to a depth of 31.5 feet below the ground surface. This area of Los Angeles is not known to have a high groundwater table. Historically highest groundwater in this area of Los Angeles is estimated to be more than 200 feet below the ground surface (Plate 1.2, Historically Highest Groundwater Contours and Borehole Log Data Locations San Fernando 7½ Minute Quadrangle in Seismic Hazard Zone Report for the Burbank Quadrangle, SHZR-015).

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<sup>&</sup>lt;sup>2</sup> Relative compaction refers to the ratio of the in-place dry density of soil to the maximum dry density of the same material as obtained by the "modified proctor" (ASTM D1557-14) test procedure.

# 5.5 <u>FOUNDATION SUPPORT</u>

# 5.5.1 New Structures

All proposed footings shall be embedded within the competent alluvium or a new compacted fill cap in accordance with the recommendations below. Conventional foundations could be utilized for the proposed development.

Foundation support for the new structures could be derived by utilizing a conventional, shallow foundation system embedded within the competent alluvium or new compacted fill cap. Allowable design parameters for foundations are provided below.

# For structures with subterranean parking levels use the following:

| Minimum depth for interior and exterior footing (Measured from lowest adjacent grade) |
|---|
| Bearing pressure a. Sustained loads (lbs. per square foot)4,000 psf                   |
| Resistance to lateral loads   |
| a. Passive soil resistance (lbs. per cubic ft.)                                       |
| Within Alluvium   |
| Maximum allowable for Alluvium5,000 psf   |
| b. Coefficient of sliding friction  |

The allowable bearing pressures are for dead plus long-term live loads and include a factor-of-safety of at least 3.0.

# **For On-Grade Structures**

| Minimum depth for interior and exterior footing (Measured from lowest adjacent grade) | 8 inches  |
|---|-----------|
| Bearing pressure  a. Sustained loads (lbs. per square foot)                           | 2,000 psf |
| Resistance to lateral loads   |           |
| a. Passive soil resistance (lbs. per cubic ft.)                                       |           |
| Within Alluvium or fill   | 300 pcf   |
| Maximum allowable for Alluvium or fill3   | ,000 psf  |
| b. Coefficient of sliding friction  | 0.35      |

Column footings can be designed for a bearing pressure of 6,000 psf for buildings with subterranean levels and 3,000 psf for on-grade buildings.

The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. When combining passive and friction for lateral resistance, the passive component should be reduced by one third.

All continuous footings should be reinforced with a minimum of four #4 steel bars; two placed near the top and two near the bottom of the footings. Footing excavations should be cleaned of all loose soil, moistened, free of shrinkage cracks and approved by the geologist and geotechnical engineer prior to placing forms, steel, or concrete.

Based on the anticipated building loads footings designed and constructed in accordance with the soil criteria included within the referenced report are expected to settle less than ½ to ½ inch in a distance of 20 feet. Differential settlement is expected to be less than ¼ inch. The total and differential settlements are within acceptable and allowable tolerances for conventional foundations.

# 5.5.2 Mat Foundation

If desired a mat foundation can be used for support. For vertical capacity, the mat may be assumed to have an allowable uniform bearing capacity of 2,500 psf. The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces.

For computing deflection, a subgrade modulus of 125 kips/ft^3 may be assumed. For aesthetic reasons, the deflection should not exceed ½ inch in 30 feet. The mat is not expected to experience any differential settlement.

# 5.6 <u>RETAINING WALLS</u>

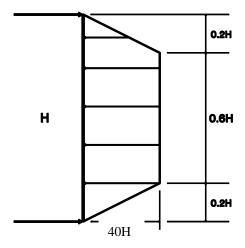
# 5.6.1 Retaining Wall

Cantilevered retaining walls are not proposed for the project. However, any future cantilevered walls to a height of 6 feet at the site should be designed for an equivalent fluid pressure equal to 30 pcf for level backfill.

Retaining walls for the parking garage will be designed for an at-rest pressure. The design at-rest earth pressure on basement walls is 65 pcf.

Restrained/braced retaining walls that are pinned by a non-yielding floor may be designed for the trapezoidal pressure distribution noted below. The uniform trapezoidal pressure may be assumed over the central six tenths of the wall height. The pressure may be decreased to zero at the top and bottom of the wall.

# TRAPEZOIDAL DISTRIBUTION OF PRESSURE



Retaining walls should be provided with a subdrain or weepholes covered with a minimum of 12 inches of 34 inch crushed gravel.

It is recommended that retaining walls be waterproofed. Waterproofing design and inspection of its installation is not the responsibility of the geotechnical engineer. A qualified waterproofing consultant should be retained in order to recommend a product or method, which would provide protection to below grade walls.

Retaining walls higher than six feet need to consider a seismic surcharge from the Design Earthquake. Walls higher than 6 feet are not According to the City of Los Angeles, the seismic surcharge should be calculated using a factor of safety of 1.0 with the PGA corresponding to  $\frac{1}{2}$  of  $\frac{2}{3}$ rds of the PGA<sub>M</sub>. The PGA<sub>M</sub> is 0.875 and therefore the corresponding seismic design value is 0.291g.

A seismic surcharge for retaining walls designed for active conditions is considered. For a 32 foot high retaining wall, the static design force is equal to 33.28 kips (32ft^2 \*65 pcf/2).

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For a ground motion of 0.291g and a FS of 1.0, the enclosed calculations indicate an unbalanced force under seismic conditions from the Maximum Considered Earthquake is or 25.232 kips.

Since the static design force is higher than the seismic force an additional seismic need not be added.

# 5.6.2 Retaining Wall Backfill

Retaining wall backfill should be compacted to a minimum of 90 percent of the maximum density as determined by ASTM D 1557-14. It should be pointed out that the use of heavy compaction equipment in close proximity to retaining walls can result in excess wall movement and/or soil loadings exceeding design values. In this regard, care should be taken during backfilling operations.

#### 5.7 **TEMPORARY EXCAVATIONS**

All vertical cuts shall be inspected by our office to verify geologic continuity.

Un-shored vertical cuts to a height of five feet (5') may be made in soil materials at the site. Unshored cuts in excess of five feet (5') shall be sloped at a gradient of no steeper than 1:1 (horizontal to vertical) for the portion of the excavation above the vertical cut.

A representative of the geotechnical engineer or geologist should be present during grading to see temporary slopes. All excavations, including: caissons, footings, and utility trenches, shall be properly and adequately fenced and/or covered to ensure the safety of all those working on the project.

All temporary excavations shall be stabilized as soon as possible after the initial excavation.

Shoring should be designed to retain an equivalent fluid pressure of 35 PCF. Surcharge from temporary traffic loaded has been incorporated into the design.

### **5.7.1 Shoring**

Shoring may consist of cast-in-place concrete piles with wood-lagging. Shoring piles should be a minimum of 18 inches in diameter and a minimum of 8 feet into alluvium below the base of the excavation. Piles may be assumed fixed 3 feet below the base of the excavation. For the vertical forces, piles may be designed for a skin friction of 300 pounds per square foot for that portion of pile in contact with the alluvium. Soldier piles should be spaced a maximum of 10 feet on center.

The friction value is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces.

Resistance to lateral loading may be provided by passive earth pressure within the alluvium below the base of the excavation.

Passive earth pressure may be computed as an equivalent fluid having a density of 400 pounds per cubic foot. The maximum allowable earth pressure is 4,000 pounds per square foot. For design of isolated piles, the allowable passive and maximum earth pressures may be increased by 100 percent. Piles spaced more than  $2\frac{1}{2}$  pile diameters on center may be considered isolated.

# 5.7.2 Earth Anchors

Tie-back anchors may be used to resist lateral loads. Pressure grouted friction anchors are recommended. For design purposes, it is assumed that the active wedge adjacent to the shoring is defined by a plane drawn at 30 degrees with the vertical through the bottom of the excavation. Friction anchors should extend at least 15 feet beyond the potential active wedge or to a greater length if necessary to develop the desired capacities.

The capacities of the anchors should be determined by testing of the initial anchors as outlined in a following section. For preliminary design purposes, it is estimated that cast-in-place gravity anchors will develop an average value of 300 pounds per square foot. Pressure grouted and post grouted anchors will develop much higher capacities. Only the frictional resistance developed beyond the active wedge would be effective in resisting lateral loads. If the anchors are spaced at least six feet on center, no reduction in the capacity of the anchors need be considered due to group action.

The anchors may be installed at angles of 20 to 40 degrees below the horizontal. Caving and sloughing of the anchor hole should be anticipated and provisions made to minimize such caving and sloughing. To minimize chances of caving and sloughing, that portion of the anchor shaft within the active wedge should be backfilled with sand before testing the anchor. This portion of the shaft should be filled tightly and flush with the face of the excavation. The sand backfill should be placed by pumping; the sand may contain a small amount of cement to facilitate pumping.

At least 10 percent of the initial anchors for a 24-hour 200 percent test and 10 percent additional anchors for quick 200 percent tests. The specific anchors selected for the 200 percent test should be representative and acceptable to the geotechnical engineer. The purpose of the 200 percent tests is to verify the friction value assumed in design. The anchors should be tested to develop twice the assumed friction value. Anchor rods of sufficient strength should be installed in these anchors to support the 200 percent test loading. Where satisfactory tests are not achieved on the initial anchors, the anchor diameter and/or length should be increased until satisfactory test results are obtained. The total deflection during the 24-hour 200 percent test should not exceed 12 inches. During the 24-hour test, the anchor deflection should not exceed 0.75 inch measured after the 200 percent test load is applied. If the anchor movement after the 200 percent load has been applied for 12 hours is less than 0.5 inch, and the movement over the previous four hours has been less than 0.1 inch, the 24-hour test may be terminated.

For the quick 200 percent tests, the 200 percent test load should be maintained for 30 minutes. The total deflection of the anchor during the 200 percent quick tests should not exceed 12 inches; the deflection after the 200 percent test load has been applied should not exceed 0.25 inch during the 30-minute period.

All of the anchors should be pretested to at least 150 percent of the design load; the total deflection during the test should not exceed 12 inches. The rate of creep under the 150 percent test should not exceed 0.1 inch over a 15-minute period for the anchor to be approved for the design loading.

After a satisfactory test, each anchor should be locked-off at the design load. The locked-off load should be verified by rechecking the load in the anchor. If the locked-off load varies by more than 10 percent from the design load, the load should be reset until the anchor is locked-off within 10 percent of the design load.

The installation of the anchors and the testing of the completed anchors should be observed by a deputy grading inspector under the direction of the geotechnical engineer.

## 5.7.3 Lagging

Lagging will be required between piles. Due to arching in the soils, the pressure on the lagging will be less that on the shoring piles. It is recommended that the lagging be designed for the full design pressure but be limited to a maximum of 400 pounds per square foot. The void between the lagging and the back-cut should be slurry-filled and observed by a representative of the geotechnical engineer.

A representative of the geotechnical engineer or geologist should be present during grading to see temporary slopes. All excavations, including: caissons, footings, and utility trenches, shall be properly and adequately fenced and/or covered to ensure the safety of all those working on the project.

All temporary excavations shall be stabilized as soon as possible after the initial excavation.

# **5.7.4** Deflection

It is difficult to accurately predict the amount of deflection of a shored embankment. It should be realized that some deflection will occur. It is estimated that the deflection could be on the order of ½ to one inch at the top of the shored embankment. If greater deflection occurs during construction, additional bracing may be necessary to minimize settlement of adjacent buildings and utilities in adjacent street and alleys. If desired to reduce the deflection, a greater active pressure could be used in the shoring design. Where internal bracing is used, the rakers should be tightly wedged to minimize deflection. The proper installation of the raker braces and the wedging will be critical to the performance of the shoring.

# 5.7.5 **Monitoring**

Because of the depth of the excavation, some mean of monitoring the performance of the shoring system is suggested. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all soldier piles and the lateral movement along the entire lengths of selected soldier piles. Also, some means of periodically checking the load on selected anchors will be necessary, where applicable.

Some movement of the shored embankments should be anticipated as a result of the relatively deep excavation. It is recommended that photographs of the existing buildings on the adjacent properties be made during construction to record any movements for use in the event of a dispute.

Monitoring of the performance of the shoring system is recommended. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all the soldier piles. Also, some means of periodically checking the load on selected anchors may be necessary.

# 5.8 <u>SLAB-ON-GRADE</u>

If a slab-on-grade is used for the interior of the building it should be a minimum of five inches thick and reinforced with No. 4 bars at 16 inches on center, both ways. The slab should be underlain by a 10-mil Visqueen plastic membrane sandwiched between two, two-inch thick layers of sand or applicable Green Building Code design requirements. The sand should contain sufficient fines to allow light compaction (e.g. drum roller) to an unyielding condition. The plastic Visqueen barrier should be sealed at all splices, around plumbing, and at the perimeter of slab areas. Every effort should be made to provide a continuous barrier and care should be taken to not puncture the membrane. The splices between layers should be generously staggered. The slab can be placed directly onto the alluvium or two feet of compacted fill.

# 5.9 EXTERIOR FLATWORK AND AUXILIARY STRUCTURES

Whenever planned, exterior flatwork should be placed directly on alluvium or over a two-foot blanket of approved compacted fill. Five-inch net sections with #4 bars at 18 inches o.c.e.w. are also advised. Control joints should be planned at not more than twelve foot spacing for larger concrete areas. Narrower areas of flatwork such as walkways should have control joints planned at not greater than 1.5 times the width of the walkway. Recommendations provided above for interior slabs can also be used for exterior flatwork, but without a sand layer or Visqueen moisture barrier. Additionally, it is also recommended that at least 12-inch deepened footings be constructed along the edges of larger concrete areas.

Movement of slabs adjacent to structures can be mitigated by doweling slabs to perimeter footings. Doweling should consist of No. 4 bars bent around exterior footing reinforcement. Dowels should be extended at least two feet into planned exterior slabs. Doweling should be spaced consistent with the reinforcement schedule for the slab. With doweling, 3/8-inch minimum thickness expansion joint material should be provided. Where expansion joint material is provided, it should be held down about 3/8 inch below the surface. The expansion joints should be finished with a color matched, flowing, flexible sealer (e.g., pool deck compound) sanded to add mortar-like texture. As an option to doweling, an architectural separation could be provided between the main structures and abutting appurtenant improvements.

Auxiliary structures such as trash enclosures and garden walls can be placed directly on alluvium or on a two-foot blanket of compacted fill.

# 5.10 **CONCRETE**

We recommend that the low permeable concrete be utilized at the site to limit moisture transmission through slab and foundation. If groundwater is encountered during construction pumping will be required to place concrete below the water level. Any concrete placed below the water table should have an appropriate increase of psi in accordance with the Building Code. For this purpose, the water/cement ratio to be used at the site should be limited to 0.5 (0.45 preferred). Limited use (subject to approval of mix designs) of a water reducing agent may be included to increase workability. The concrete should be properly cured to minimize risk of shrinkage cracking. Pea gravel mixes are specifically not recommended but could be utilized for relatively non-critical improvements (e.g., flatwork) and other improvements provided the mix designs consider limiting shrinkage.

Contractors/other designers should take care in all aspects of designing mixes, detailing, placing, finishing, and curing concrete. The mix designers and contractor are advised to consider all available steps to reduce cracking. The use of shrinkage compensating cement or fiber reinforcing should be considered. Mix designs proposed by the contractor should be considered subject to review by the project engineer.

# 5.11 PAVEMENT DESIGN

The following pavement sections are recommended as minimums:

| TRAFFIC INDEX                             | ASPHALT THICKNESS | BASE THICKNESS |  |
|---|-------------------|----------------|--|
| Light Traffic (T.I.=5) for parking stalls | 3 inches          | 4 inches       |  |
| and driveways                             |                   |                |  |
| Heavy Traffic (T.I.= 6.5) for loading     | 4 inches          | 6 inches       |  |
| docs and large truck traffic              |                   |                |  |

Concrete pavement sections should be a minimum of 6 inches thick and reinforced with #4 bars at 18" on center. A base of 6 inches is required below concrete pavement areas. Control joints should be planned at not more than twelve foot spacing.

All pavement should be placed on a minimum one-foot thick fill cap that is compacted to a minimum of 95% relative compaction.

### 5.12 **DRAINAGE**

Drainage should be directed away from structures via non-erodible conduits to suitable disposal areas. Two percent drainage is recommended directly away from structures although Building Code and Civil Engineer design parameters take precedence. All enclosed planters should be provided with a suitably located drain or drains and/or flooding protection in the form of weep holes or similar. Preferably, structures should have roof gutters and downspouts tied directly to the area drainage system.

#### 5.13 **PLAN REVIEW**

When detailed grading and structural plans are developed, they should be forwarded to this office for review and comment.

File No: 1732-64

#### 5.14 **AGENCY REVIEW**

All soil, geologic, and structural aspects of the proposed development are subject to the review and approval of the governing agency(s). It should be recognized that the governing agency(s) can dictate the manner in which the project proceeds. They could approve or deny any aspect of the proposed improvements and/or could dictate which foundation and grading options are acceptable.

#### 5.15 **SUPPLEMENTAL CONSULTING**

During construction, a number of reviews by this office are recommended to verify site geotechnical conditions and conformance with the intentions of the recommendations for Although not all possible geotechnical observation and testing services are required by the governing agencies, the more site reviews requested, the lower the risk of future site problems. The following site reviews are advised, some of which will probably be required by the agencies.

| Cut and/or shoring observation  |
|---|
| Reinforcement for all foundations                                     |
| Slab subgrade moisture barrier membrane                               |
|   |
| Slab subgrade rock placement  |
|   |
| Presaturation checks for all slabs in primary structure areasRequired |
| Presaturation checks for all slabs for appurtenant structures Advised |
| Slab steel placement, primary and appurtenant structures              |
| Compaction of utility trench backfill                                 |

Unless otherwise agreed to in writing, all supplemental consulting services will be provided on an as-needed, time-and-expense, fee schedule basis.

#### 5.16 **PROJECT SAFETY**

The contractor is the party responsible for providing a safe site. This consultant will not direct the contractor's operations and cannot be responsible for the safety of personnel other than his own representatives on site. The contractor should notify the owner if he is aware of and/or anticipates unsafe conditions. If the geotechnical consultant at the time of construction considers conditions unsafe, the contractor, as well as the owner's representative, will be notified. Within this report the terminology safe or safely may have been utilized. The intent of such use is to imply low risk. Some risk will remain, however, as is always the case.

# 6.0 REMARKS

Only a portion of subsurface conditions have been reviewed and evaluated. Conclusions, recommendations and other information contained in this report are based upon the assumptions that subsurface conditions do not vary appreciably between and adjacent to observation points. Although no significant variation is anticipated, it must be recognized that variations can occur.

This report has been prepared for the sole use and benefit of our client. The intent of the report is to advise our client on geotechnical matters involving the proposed improvements. It should be understood that the geotechnical consulting provided and the contents of this report are not perfect. Any errors or omissions noted by any party reviewing this report, and/or any other geotechnical aspect of the project, should be reported to this office in a timely fashion. The client is the only party intended by this office to directly receive the advice. Subsequent use of this report can only be authorized by the client. Any transferring of information or other directed use by the client should be considered "advice by the client."

Geotechnical engineering is characterized by uncertainty. Geotechnical engineering is often described as an inexact science or art. Conclusions and recommendations presented herein are partly based upon the evaluations of technical information gathered, partly on experience, and partly on professional judgment. The conclusions and recommendations presented should be considered "advice." Other consultants could arrive at different conclusions and recommendations. Typically, "minimum" recommendations have been presented. Although some risk will always remain, lower risk of future problems would usually result if more restrictive criteria were adopted. Final decisions on matters presented are the responsibility of the client and/or the governing agencies. No warranties in any respect are made as to the performance of the project.

APPENDIX 'A'

Boring Logs

Sheet 1 of 1

Job Number: 1732-64

Project: San Fernando Mission Boulevard/ Harridge Development Group LLC

Date Performed: 2/22/16

Boring No: 1

Boring Location: See Site Map

| Sample           |              |             |      |  |                                      |         |          |
|------------------|--------------|-------------|------|--|--------------------------------------|---------|----------|
| Depth in Feet    | Blows per 6" | Undisturbed | Bulk | Bedrock/ Soil Description  | Color                                | Density | Moisture |
| ===              |              |             |      | 0-2" Asphalt, 4" Base Fill (Af):Clayey silty sand                | Dark brown, dark                     | Medium  | Moist    |
| 2.5              | 5/6          | R           |      | Silty sand, includes occasional asphalt pebbles                  | green/mottled<br>Gray-brown          | Medium  | Moist    |
| - 5 -            | 5/7          | R           |      | <b>Alluvium</b><br>Silty sand                                    | Tan brown to medium brown            | Medium  | Moist    |
| 7.5              | 12/13        | R           |      | Silty sand   | Tan brown to medium brown            | Medium  | Moist    |
| 10 -             | 5/8          | R           |      | Silty sand   | Tan brown to medium brown            | Medium  | Moist    |
|                  | 8/13         | R           |      | Gravelly silty sand  | Tan-light brown                      | Medium  | Moist    |
| - 20 -<br>- 20 - | 20/22        | R           |      | Gravelly silty sand  | Tan-brown/light<br>brown, orange-tan | Medium  | Moist    |
| <br>- 25 -<br>   | 22/26        | R           |      | Gravelly sand  | Tan                                  | Medium  | Moist    |
| - 30 -           | 28/17        | R           |      | Gravelly sand; abundant subangular and subrounded rock fragments | Tan-light orange<br>brown            | Medium  | Moist    |
|                  |              |             |      | End At 31.5', Fill To 3', No Water, No Caving                    |                                      |         |          |
| - 40 -           |              |             |      | Feffer Geological Consulting                                     |                                      |         | Figure   |

Sheet 1 of 1

Job Number: 1732-64

Project: San Fernando Mission Boulevard/

Harridge Development Group LLC

Date Performed: 2/22/16

Boring No: 2

Boring Location: See Site Map

|                      |                              | San<br>Typ  |      |   |  |         |          |  |
|----------------------|------------------------------|-------------|------|---|--|---------|----------|--|
| Depth in Feet        | Blows per 6"                 | Undisturbed | Bulk | Bedrock/ Soil Description                                       | Color  | Density | Moisture |  |
| -                    |                              |             |      | 0-3" Asphalt, 4" Base Fill (Af): Clayey silty sand              | Dark brown, dark                               | Medium  | Moist    |  |
| 2.5                  | 5/5                          | R           |      | Silty sand, contains asphalt pebbles                            | green/mottled<br>Medium brown to<br>dark brown | Medium  | Moist    |  |
| - 5 -                | 3/5                          | R           |      | Alluvium (Qa):<br>Silty sand                                    | Medium brown to tan brown                      | Medium  | Moist    |  |
| 7.5                  | 6/9                          | R           |      | Silty sand  | Medium brown to tan brown                      | Medium  | Moist    |  |
| 10 -                 | 6/9                          | R           |      | Silty sand  | Medium brown to tan brown                      | Medium  | Moist    |  |
| <br>- 15 -<br>       | 9/9                          | R           |      | Silty sand  | Medium brown to tan brown                      | Medium  | Moist    |  |
| 20 -<br>- 2 -        | 15/21                        | R           |      | Pebbly sand; very coarse-grained                                | Tan to light brown                             | Medium  | Moist    |  |
| <br>- 25 -<br>       | 11/24                        | R           |      | Pebbly silty sand   | Tan to light brown                             | Medium  | Moist    |  |
| - 30 -<br>- 30 -<br> | 18/18                        | R           |      | Pebbly silty sand End At 30.5', Fill To 3', No Water, No Caving | Tan to light brown                             | Medium  | Moist    |  |
| - 35 -<br>- 35 -<br> |                              |             |      |   |  |         |          |  |
| - 40 -               | Feffer Geological Consulting |             |      |   |  |         |          |  |

Sheet 1 of 1

Job Number: 1732-64

Project: San Fernando Mission Boulevard/ Harridge Development Group LLC

Date Performed: 2/22/16

Boring No: 3

Boring Location: see site map

| Sedrock/ Soil Description   Sedrock/ Soil Description | Sample             |           |   |  |   |                  |         |          |
|---|--------------------|-----------|---|--|---|------------------|---------|----------|
| 2.5 5/5 R Silty sand, contains scattered angular pebbles Medium brown Medium Moist  Alluvium (Qa): Silty sand Tan Medium Moist  7.5 12/17 R Gravelly pebbly silty sand Tan Medium Moist  10 12/14 R Gravelly pebbly silty sand Tan Medium Moist  - 15 - 50 for 6 R Gravelly pebbly silty sand Light orange tan Medium Moist  - 20 - 24/40 R Gravelly sand Light tan to gray Medium Moist  - 25 - 20/37 R Sand Tan to white and black  - 30 13/23 R Gravelly sand Tan to white and black  - 30 13/23 R Gravelly sand Tan-orange Medium Moist  - 40 - 50 for 6 R Gravelly sand Tan to white and black  - 40 - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  - 50 for 6 R Gravelly sand Tan to white and black  | Depth in Feet      | #   #     |   |  | Bedrock/ Soil Description                         | Color            | Density | Moisture |
| 2.5   5/5   R   Silty sand, contains scattered angular pebbles   Medium brown   Medium   Moist  |                    |           |   |  | 0-3" Asphalt, 5" Base Fill (Af):Clayey silty sand |                  | Medium  | Moist    |
| Tan Medium Moist  Tan Tan Medium Moist  Tan Tan Medium Moist  Tan Tan Medium Moist  Tan Tan Tan Tan Tan Tan Medium Moist  Tan   | 2.5                | 5/5       | R |  | Silty sand, contains scattered angular pebbles    | _                | Medium  | Moist    |
| Gravelly pebbly silty sand  Tan  Medium  Moist  Tan  Medium  Moist  Tan  Medium  Moist  Light orange tan  Medium  Moist  Tan  Tan  Tan  Medium  Moist  Tan  Tan  Medium  Moist  Tan  Tan  Tan  Tan  Tan  Tan  Tan  Ta  | <br>- 5 -          | 7/14      | R |  |   | Tan              | Medium  | Moist    |
| Gravelly pebbly silty sand  Light orange tan Medium Moist  15 - 50 for 6 R Gravelly pebbly silty sand  Light tan to gray Medium Moist  20 - 24/40 R Gravelly sand  Light tan to gray Medium Moist  1 - 25 - 20/37 R Sand  Tan to white and black  Medium Moist  Tan to white and black  Figure 40  End At 31.5', Fill To 3', No Water, No Caving  | 7.5                | 12/17     | R |  | Gravelly pebbly silty sand                        | Tan              | Medium  | Moist    |
| 20 - 24/40 R Gravelly sand Light tan to gray tan Medium Moist  25 - 20/37 R Sand Tan to white and black Medium Moist  30 - 13/23 R Gravelly sand Tan-orange Medium Moist  End At 31.5', Fill To 3', No Water, No Caving   | - 10 -             | 12/14     | R |  | Gravelly pebbly silty sand                        | Tan              | Medium  | Moist    |
| 20/37 R Sand Tan to white and black Medium Moist  30 13/23 R Gravelly sand Tan-orange brown Medium Moist  End At 31.5', Fill To 3', No Water, No Caving   | <br><br>- 15 -<br> | 50 for 6' | R |  | Gravelly pebbly silty sand                        | Light orange tan | Medium  | Moist    |
| black  13/23 R Gravelly sand  Tan-orange brown  Moist  End At 31.5', Fill To 3', No Water, No Caving  | <br>- 20 -<br>     | 24/40     | R |  | Gravelly sand                                     |                  | Medium  | Moist    |
| End At 31.5', Fill To 3', No Water, No Caving   | <br>- 25 -<br>     | 20/37     | R |  | Sand  |                  | Medium  | Moist    |
|   | <br>- 30 -<br>     | 13/23     | R |  | Gravelly sand                                     |                  | Medium  | Moist    |
| Figure  | <br><br>           |           |   |  | End At 31.5', Fill To 3', No Water, No Caving     |                  |         |          |
|   | - 40 -             |           |   |  | Feffer Geological Consulting                      |                  |         | Figure   |

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Job Number: 1732-64

Project: San Fernando Mission Boulevard/

Harridge Development Group LLC

Date Performed: 2/22/16

Boring No: 4

Boring Location: see site map

|                  |  | Sam |      |   |                                |         |          |  |  |
|------------------|--|-----|------|---|--------------------------------|---------|----------|--|--|
| Depth in Feet    | Depth in Feet Blows per 6" Undisturbed |     | Bulk | Bedrock/ Soil Description                                 | Color                          | Density | Moisture |  |  |
|                  |  |     |      | 0-4" Asphalt, 4" Base <b>Fill (Af)</b> :Clayey silty sand | Dark brown, dark green/mottled | Medium  |          |  |  |
| 2.5              | 5/5                                    | R   |      | Silty sand  | Medium brown                   | Medium  | Moist    |  |  |
| 5 -              | 4/5                                    | R   |      | Alluvium (Qa):<br>Silty sand                              | Tan                            | Medium  | Moist    |  |  |
| 7.5              | 5/7                                    | R   |      | Sandy silt  | Tan                            | Medium  | Moist    |  |  |
| 10 -<br>         | 7/9                                    | R   |      | Pebbly sand   | Tan                            | Medium  | Moist    |  |  |
|                  | 10/10                                  | R   |      | Pebbly sand   | Light orange tan               | Medium  | Moist    |  |  |
| - 20 -<br>- 2 -  | 26/18                                  | R   |      | Gravelly sand   | Light tan to gray Medium tan   |         | Moist    |  |  |
| <br>- 25 -<br>   | 12/20                                  | R   |      | Clayey sandy silt  Tan to white and black  Dense          |                                | Dense   | Moist    |  |  |
| - 30 -<br>- 30 - | 15/23                                  | R   |      | Silty sand  | Tan-orange<br>brown            | Dense   | Moist    |  |  |
| <br>- 35 -<br>   |  |     |      | End At 31.5', Fill To 3', No Water, No Caving             |                                |         |          |  |  |
| <br>- 40 -       | Feffer Geological Consulting           |     |      |   |                                |         |          |  |  |

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Job Number: 1732-64

Project: San Fernando Mission Boulevard/

Harridge Development Group LLC

Date Performed: 2/22/16

Boring No: 5

Boring Location: see site map

| Comple               |              |                |      |  |   |         |          |
|----------------------|--------------|----------------|------|--|---|---------|----------|
|                      |              | Sample<br>Type |      |  |   |         |          |
| Depth in Feet        | Blows per 6" | Undisturbed    | Bulk | Bedrock/ Soil Description                                  | Color   | Density | Moisture |
| <b>=</b>             |              |                |      | 0-4" Asphalt, 4-14" Base <b>Fill (Af):</b> Silty sand with | Dark brown                                    | Medium  | Moist    |
|                      |              |                |      | abundant pebbles   |   |         |          |
|                      | 6/8          | R              |      | Silty sand, contains scattered pebbles                     | Yellow-tan                                    | Medium  | Moist    |
| - 5 -                | 7/8          | R              |      |  | Dark brown and orange-tan, mottled, light tan | Medium  | Moist    |
| 7.5                  | 7/8          | R              |      | Alluvium (Qa):<br>Sandy silt                               | Medium brown                                  | Medium  | Moist    |
| - 10 -<br>           | 9/11         | R              |      | Clayey silt  | Medium brown                                  | Medium  | Moist    |
|                      | 22/23        | R              |      | Pebbly sand; abundant very coarse sand                     | Tan to medium<br>brown                        | Medium  | Moist    |
| - 20 -<br>- 20 -<br> | 8/9          | R              |      | Gravelly sand  | Light tan to gray<br>tan                      | Medium  | Moist    |
| - 25 -<br>- 2 -      | 10/16        | R              |      | Clayey silt  | Medium brown                                  | Medium  | Moist    |
| - 30 -<br>           | 28/17        | R              |      | Clayey silt to silt; contains scattered subangular pebbles | Medium brown                                  | Medium  | Moist    |
|                      |              |                |      | End At 31.5', Fill To 6', No Water, No Caving              |   |         |          |
| - 40 -               |              |                |      |  |   | 1       | Figure   |
|                      |              |                |      | Feffer Geological Consulting                               |   |         | 34.0     |

APPENDIX 'B'

**Laboratory Testing** 



SL16.2137 March 4, 2016

Feffer Geological Consulting 1990 S. Bundy Drive 4<sup>th</sup> Floor Los Angeles, California 90025

Attn: Joshua R. Feffer

**Subject:** Laboratory Testing

**Site:** 16225 W San Fernando Mission Boulevard

Los Angeles, California

Job: FEFFER/HARRIDGE DEVELOPMENT-SAN FERNANDO MISSION BLVD -1732-64

Laboratory testing for the subject property was performed by Soil Labworks, LLC., under the supervision of the undersigned Engineer. Samples of the earth materials were obtained from the subject property by personnel of Feffer Geological and transported to the laboratory of Soil Labworks for testing and analysis. The laboratory tests performed are described and results are attached.

Services performed by this facility for the subject property were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

GE 2891 Exp. 6-30-16

Respectfully Submitted:

ndix

SOIL LABWORKS, LLC



# **APPENDIX**

# **Laboratory Testing**

### Sample Retrieval - Drill Rig

Samples of earth materials were obtained at frequent intervals by driving a thick-walled steel sampler conforming to the most recent version of ASTM D 3550-01 (2007) with successive drops of the Kelly bar (a 140 pound hammer falling 30"). The earth material was retained in brass rings of 2.416 inches inside diameter and 1.00 inch height. The central portion of the sample was stored in close-fitting, water-tight containers for transportation to the laboratory.

# **Moisture Density**

The field moisture content and dry density were determined for each of the soil samples. The dry density was determined in pounds per cubic foot following ASTM 2937-10. The moisture content was determined as a percentage of the dry soil weight conforming to ASTM 2216-10. The results are presented below in the following table. The percent saturation was calculated on the basis of an estimated specific gravity. Description of earth materials used in this report and shown on the attached Plates were provided by the client.

| Test<br>Pit/Boring<br>No. | Sample<br>Depth      | Soil Type                | Dry<br>Density<br>(pcf) | Moisture<br>Content<br>(percent) | Percent<br>Saturation<br>(G <sub>s</sub> =2.65) |
|---------------------------|----------------------|--------------------------|-------------------------|----------------------------------|---|
| B1                        | <b>(Feet)</b><br>2.5 | <b>Soil Type</b><br>Fill | 99.9                    | 9.0                              | 36  |
| B1                        | 5                    | Alluvium                 | 104.5                   | 7.4                              | 34  |
| B1                        | 7.5                  | Alluvium                 | 104.3                   | 7.4                              | 36  |
|                           |                      |                          |                         |                                  |   |
| B1                        | 10                   | Alluvium                 | 97.1                    | 13.2                             | 50  |
| B1                        | 15                   | Alluvium                 | 114.0                   | 12.4                             | 73  |
| B1                        | 20                   | Alluvium                 | 117.0                   | 6.0                              | 39  |
| B1                        | 25                   | Alluvium                 | 113.9                   | 4.2                              | 24  |
| B1                        | 30                   | Alluvium                 | 124.2                   | 4.1                              | 33  |
| B2                        | 2.5                  | Fill                     | 102.5                   | 10.1                             | 44  |
| B2                        | 5                    | Alluvium                 | 97.9                    | 7.6                              | 29  |
| B2                        | 7.5                  | Alluvium                 | 103.8                   | 9.0                              | 40  |
| B2                        | 10                   | Alluvium                 | 111.2                   | 7.3                              | 40  |
| B2                        | 15                   | Alluvium                 | 110.7                   | 9.3                              | 50  |
| B2                        | 20                   | Alluvium                 | 102.6                   | 2.0                              | 9   |
| B2                        | 25                   | Alluvium                 | 102.4                   | 21.9                             | 94  |
| B2                        | 30                   | Alluvium                 | 112.8                   | 10.6                             | 60  |



# **Moisture Density (continued)**

| Test<br>Pit/Boring | Sample<br>Depth |           | Dry<br>Density | Moisture<br>Content | Percent<br>Saturation  |
|--------------------|-----------------|-----------|----------------|---------------------|------------------------|
| No.                | (Feet)          | Soil Type | (pcf)          | (percent)           | (G <sub>5</sub> =2.65) |
| В3                 | 2.5             | Fill      | 103.0          | 7.7                 | 34                     |
| В3                 | 5               | Alluvium  | 111.3          | 3.7                 | 20                     |
| В3                 | 7               | Alluvium  | 117.0          | 3.8                 | 24                     |
| В3                 | 10              | Alluvium  | 119.0          | 2.9                 | 20                     |
| B3                 | 15              | Alluvium  | 120.7          | 3.3                 | 24                     |
| В3                 | 20              | Alluvium  | 113.0          | 5.7                 | 33                     |
| В3                 | 25              | Alluvium  | 102.6          | 2.8                 | 12                     |
| В3                 | 30              | Alluvium  | 116.0          | 16.2                | 100                    |
| B4                 | 2.5             | Fill      | 104.4          | 8.2                 | 37                     |
| B4                 | 5               | Alluvium  | 100.2          | 10.6                | 43                     |
| В4                 | 7.5             | Alluvium  | 83.5           | 22.0                | 60                     |
| В4                 | 10              | Alluvium  | 105.5          | 3.1                 | 14                     |
| В4                 | 15              | Alluvium  | 109.0          | 5.1                 | 26                     |
| B4                 | 20              | Alluvium  | 117.7          | 5.2                 | 34                     |
| В4                 | 25              | Alluvium  | 116.2          | 14.7                | 92                     |
| В4                 | 30              | Alluvium  | 110.1          | 11.5                | 61                     |
| B5                 | 5               | Fill      | 101.5          | 9.3                 | 39                     |
| B5                 | 7.5             | Alluvium  | 96.6           | 13.7                | 51                     |
| B5                 | 10              | Alluvium  | 107.3          | 7.1                 | 35                     |
| B5                 | 15              | Alluvium  | 114.0          | 7.1                 | 42                     |
| B5                 | 20              | Alluvium  | 113.7          | 5.8                 | 34                     |
| B5                 | 25              | Alluvium  | 99.5           | 22.7                | 91                     |
| B5                 | 30              | Alluvium  | 114.5          | 16.9                | 100                    |

# **Compaction Character**

Compaction tests were performed on bulk samples of the earth materials in accordance with ASTM D1557-12. The results of the tests are provided on the table below and on the "Moisture-Density Relationship", A-Plates. The specific gravity of the fill/alluvium was estimated from the compaction curves.

| Test              | Sample          |               | Maximum           | Optimum                    |
|-------------------|-----------------|---------------|-------------------|----------------------------|
| Pit/Boring<br>No. | Depth<br>(Feet) | Soil Type     | Dry Density (pcf) | Moisture Content (Percent) |
| B2                | 0-30            | Fill/Alluvium | 133.6             | 6.8                        |



# **Shear Strength**

The peak and ultimate shear strengths of the alluvium were determined by performing consolidated and drained direct shear tests in conformance with ASTM D3080/D3080M-11. The tests were performed in a strain-controlled machine manufactured by GeoMatic. The rate of deformation was 0.01 inches per minute. Samples were sheared under varying confining pressures, as shown on the "Shear Test Diagrams," B-Plates. The moisture conditions during testing are shown on the following table and on the B-Plates. The samples indicated as saturated were artificially saturated in the laboratory. All saturated samples were sheared under submerged conditions.

| Test Pit/<br>Boring No. | Sample Depth<br>(Feet) | Dry Density<br>(pcf) | As-Tested Moisture Content (percent) |
|-------------------------|------------------------|----------------------|--------------------------------------|
| TP4                     | 5                      | 100.2                | 24.6                                 |
| TP1                     | 10                     | 97.1                 | 25.0                                 |

#### Consolidation

One-dimensional consolidation tests were performed on samples of the alluvium in a consolidometer manufactured by GeoMatic in conformance with ASTM D2435/D2435M-11. The tests were performed on 1-inch high samples retained in brass rings. The samples were initially loaded to approximately ½ of the field over-burden pressure and then unloaded to compensate for the effects of possible disturbance during sampling. Loads were then applied in a geometric progression and resulting deformation recorded. Water was added at a specific load to determine the effect of saturation. The results are plotted on the "Consolidation Test," C-Plates.

# **Expansion Index**

The expansive character of the fill/alluvium was determined by performing Expansion Index Tests in accordance with UBC 18.2 and ASTM 4829-11. A bulk sample of earth material was compacted at a specific moisture content using one fifth the compacted energy for the modified proctor test. The sample was then saturated and the expansion measured. The results of the tests are provided on the following table.

| Sample Depth |        |               | Expansion |
|--------------|--------|---------------|-----------|
| Test Pit No. | (Feet) | Soil Type     | Index     |
| B2           | 0-30   | Fill/Alluvium | 0         |



# **MOISTURE-DENSITY RELATIONSHIP A-1**

JN: <u>SL16.2137</u>

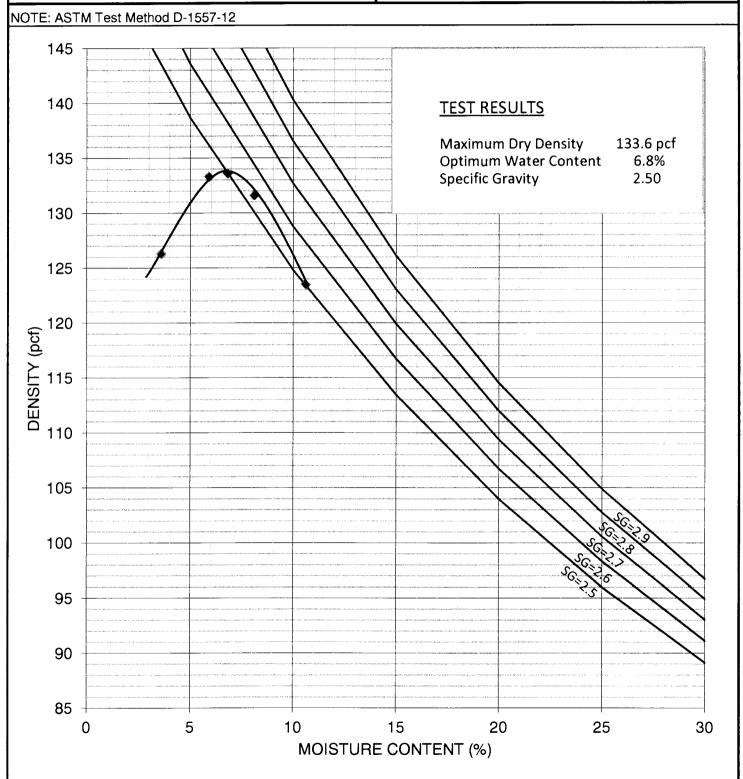
CONSULTANT: JAI

CLIENT: FEFFER/HARRIDGE-16225 San Fernando Mission

B2 @ 30'

EARTH MATERIAL:

FILL/ALLUVIUM





# **SHEAR DIAGRAM B-1**

JN: <u>**SL16.2137**</u>

CONSULTANT JAI

CLIENT: Feffer/Harridge Development Group

16225 W San Fernando Mission Blvd

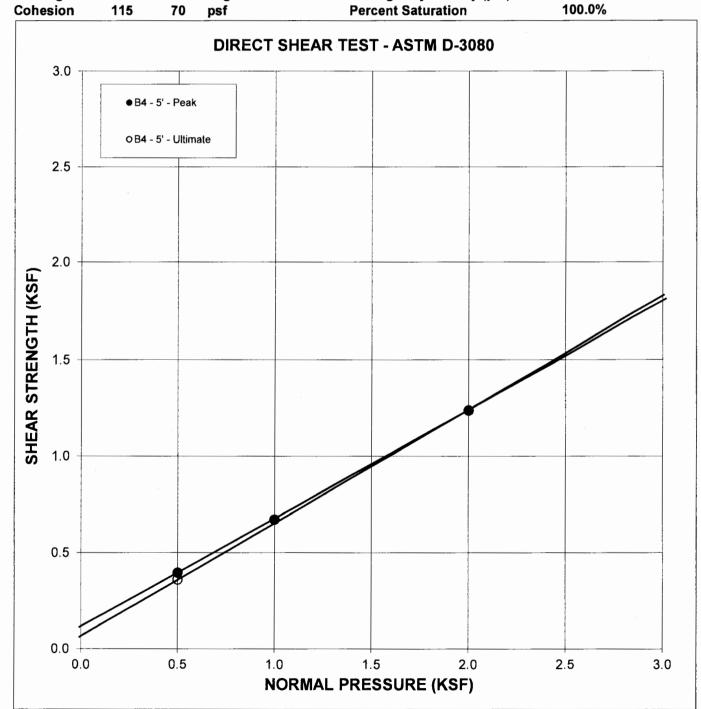
EARTH MATERIAL:

**ALLUVIUM** 

Phi Angle

PEAK 29

ULTIMATE 30 degrees Average Moisture Content Average Dry Density (pcf) 24.6% 100.2





# **SHEAR DIAGRAM B-2**

JN: <u>SL16.2137</u>

CONSULTANT JAI

CLIENT: Feffer/Harridge Development Group

16225 W San Fernando Mission Blvd

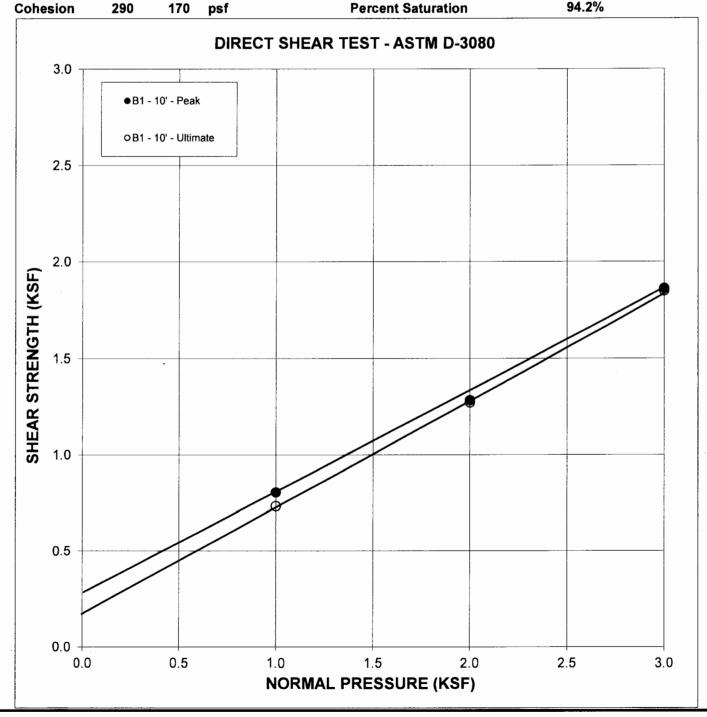
EARTH MATERIAL:

**ALLUVIUM** 

Phi Angle Cohesion PEAK 27 ULTIMATE

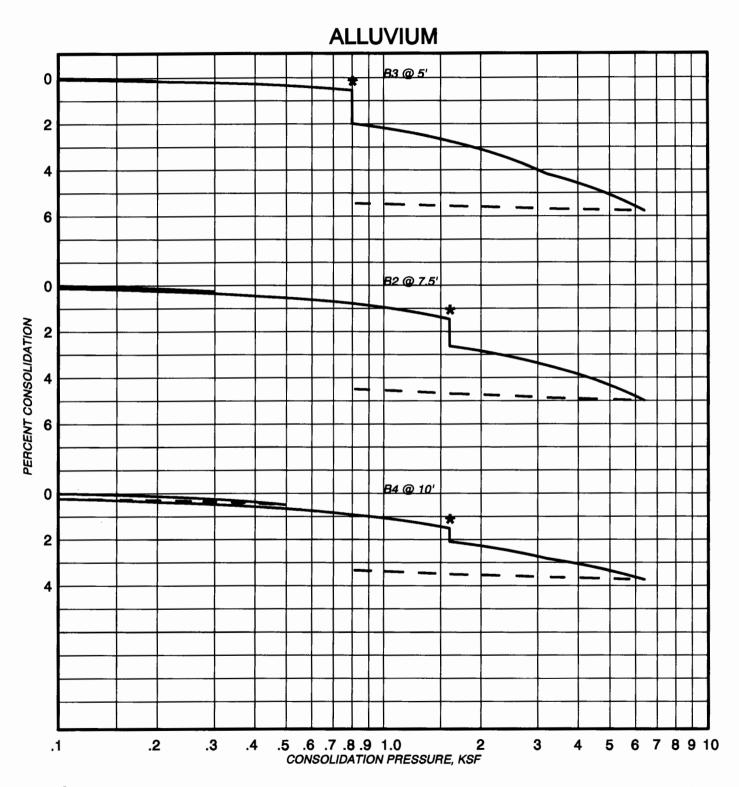
29 degrees

Average Moisture Content Average Dry Density (pcf) Percent Saturation 25.0% 97.1 94.2%



# **CONSOLIDATION TEST**

PROJECT: 2137 FEFFER/HARRIDGE - 16225 W SAN FERNANDO MISSION BLVD SAMPLES: B3 @ 5'; B2 @ 7.5'; B4 @ 10'



APPENDIX 'C'

Site Plan & Cross Sections

B5 • LOCATION OF BORING

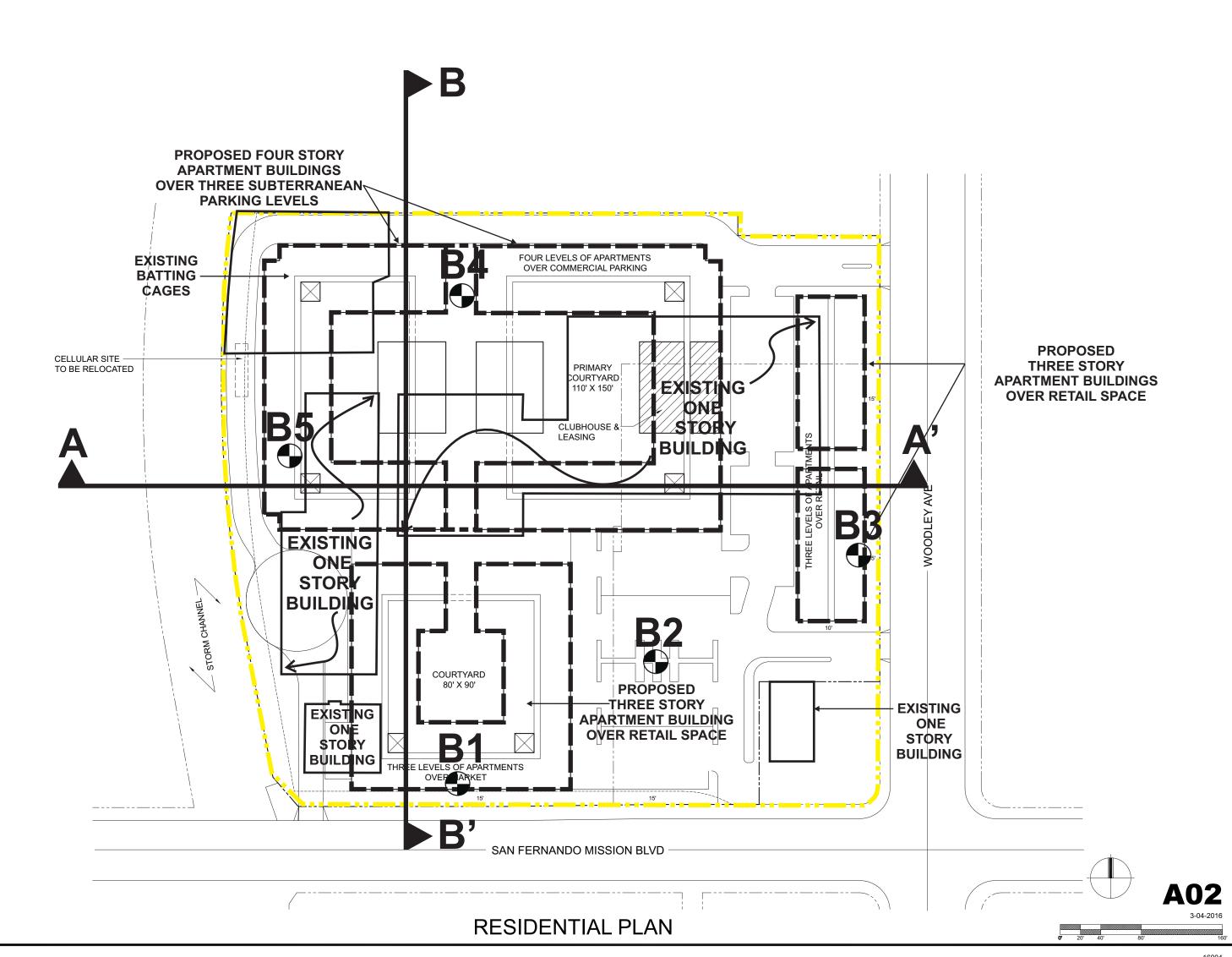
B B' SECTION LINE

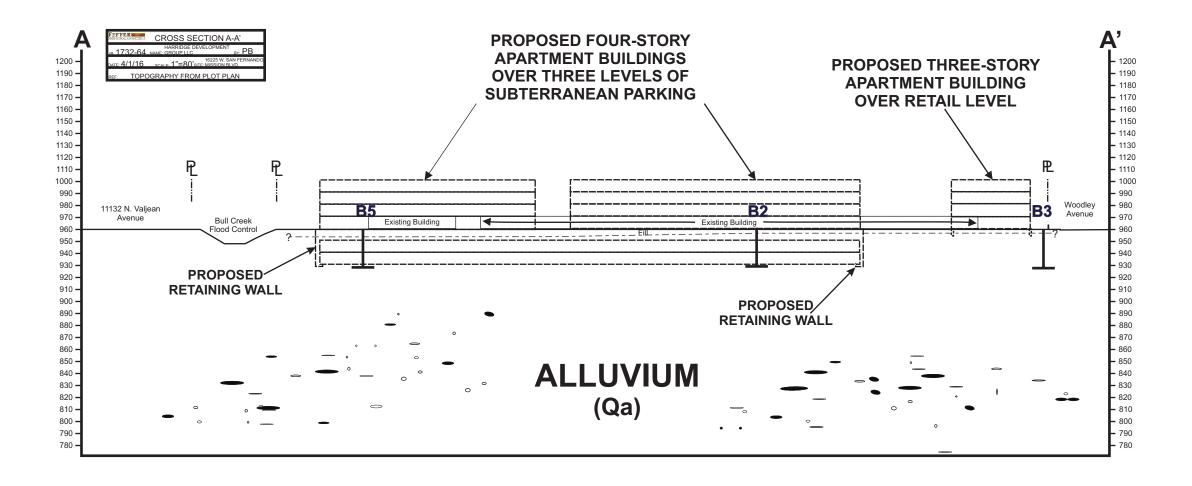
FEFFER SITE PLAN

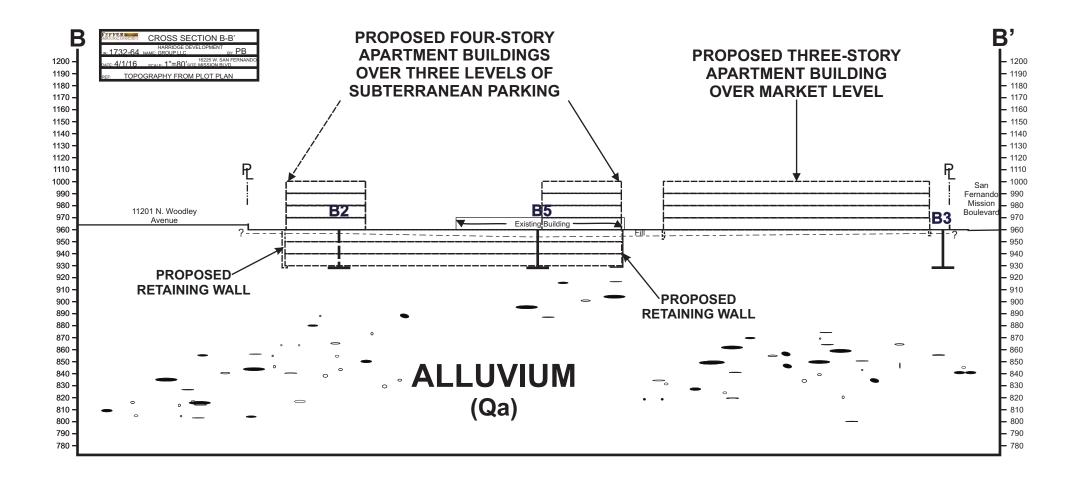
JB: 1732-64 NAME:HARRIDGE DEV. GROUP LLC BY: PB

DATE: 4/1/16 SCALE: 1"=80'SITE: MISSION BOULEVARD

REF: BASE MAP FROM PLOT PLAN







APPENDIX 'D'

**Grading Specifications** 

## STANDARD GRADING SPECIFICATIONS

These specifications present the usual and minimum requirements for grading operations performed under our supervision.

#### **GENERAL**

- 1) The Geotechnical Engineer and Engineering Geologist are the developer's representative on the project.
- 2) All clearing, site preparation or earth work performed on the project shall be conducted by the contractor under the supervision of the Geotechnical Engineer.
- 3) It is the contractor's responsibility to prepare the ground surface to receive the fills to the satisfaction of the Geotechnical Engineer and to place, spread, mix, water, and compact the fill in accordance with the specifications of the Geotechnical Engineer. The contractor shall also remove all material considered unsatisfactory by the Geotechnical Engineer.
- 4) It is the contractor's responsibility to have suitable and sufficient compaction equipment on the job site to handle the amount of fill being placed. If necessary, excavation equipment will be shut down to permit completion of compaction. Sufficient watering apparatus will also be provided by the contractor, with due consideration for the fill material, rate of placement and time of year.
- 5) A final report shall be issued by our firm outlining the contractor's conformance with these specifications.

#### SITE PREPARATION

- 1) All vegetation and deleterious materials such as rubbish shall be disposed of off-site. Soil, alluvium or rock materials determined by the Geotechnical Engineer as being unsuitable for placement in compacted fills shall be removed and wasted from the site. Any material incorporated as a part of a compacted fill must be approved by the Geotechnical Engineer.
- 2) The Engineer shall locate all houses, sheds, sewage disposal systems, large trees or structures on the site or on the grading plan to the best of his knowledge prior to preparing the ground surface.

Any underground structures such as cesspools, cisterns, mining shafts, tunnels, septic tanks, wells, pipe lines, or others not located prior to grading are to be removed or treated in a manner prescribed by the Geotechnical Engineer.

3) After the ground surface to receive fill has been cleared, it shall be scarified, disced or bladed by the contractor until it is uniform and free from ruts, hollows, hummocks or other uneven features which may prevent uniform compaction.

The scarified ground surface shall then be brought to optimum moisture, mixed as required, and compacted as specified. If the scarified zone is greater than twelve inches (12") in depth, the excess shall be removed and placed in lifts restricted to six inches (6").

Prior to placing fill, the ground surface to receive fill shall be inspected, tested and approved by the Geotechnical Engineer.

### PLACING, SPREADING AND COMPACTION OF FILL MATERIALS

- 1) The selected fill material shall be placed in layers which when compacted shall not exceed six inches (6") in thickness. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to insure uniformity of material and moisture of each layer.
- 2) Where the moisture content of the fill material is below the limits specified by the Geotechnical Engineer, water shall be added until the moisture content is as required to assure thorough bonding and thorough compaction.
- 3) Where the moisture content of the fill material is above the limits specified by the Geotechnical Engineer, the fill materials shall be aerated by blading or other satisfactory methods until the moisture content is adequate.

#### **COMPACTED FILLS**

- 1) Any material imported or excavated on the property may be utilized in the fill, provided each material has been determined to be suitable by the Geotechnical Engineer. Roots, tree branches or other matter missed during clearing shall be removed from the fill as directed by the Geotechnical Engineer.
  - 2) Rock fragments less than six inches (6") in diameter may be utilized in the fill, provided:
    - a) They are not placed in concentrated pockets.
    - b) There is a sufficient percentage of fine-grained material to surround the rocks.
    - c) The distribution of the rocks is supervised by the Geotechnical Engineer.
- 3) Rocks greater than six inches (6") in diameter shall be taken off-site, or placed in accordance with the recommendations of the Geotechnical Engineer in areas designated as suitable for rock disposal. Details for rock disposal such as location, moisture control, percentage of rock placed, will be referred to in the "Conclusions and Recommendations" section of the geotechnical report.

If the rocks greater than six inches (6") in diameter were not anticipated in the preliminary geotechnical and geology report, rock disposal recommendations may not have been made in the "Conclusions and Recommendations" section. In this case, the contractor shall notify the Geotechnical Engineer if rocks greater than six inches (6') in diameter are encountered. The Geotechnical Engineer will than prepare a rock disposal recommendation or request that such rocks be taken off-site.

4) Representative samples of materials to be utilized as compacted fill shall be analyzed in the laboratory by the Geotechnical Engineer to determine their physical properties. If any materials other than that previously tested is encountered during grading, the appropriate analysis of this material shall be conducted by the Geotechnical Engineer as soon as possible.

Material that is spongy, subject to decay or otherwise considered unsuitable shall not be used in the compacted fill.

5) Each layer shall be compacted to a minimum of ninety percent (90%) of the maximum density in compliance with the testing method specified by the controlling governmental agency (ASTM D-1557).

If compaction to a lesser percentage is authorized by the controlling governmental agency because of a specific land use or expansive soil conditions, the area to receive fill compacted to less than ninety percent (90%) shall either be delineated on the grading plan or appropriate reference made to the area in the geotechnical report.

- 6) Compaction shall be by sheeps foot roller, multi-wheeled pneumatic tire roller, or other types of acceptable rollers. Rollers shall be of such design that they will be able to compact the fill to the specified density. Rolling shall be accomplished while the fill material is at the specified moisture content. The final surface of the lot areas to receive slabs-on-grade should be rolled to a smooth, firm surface.
- 7) Field density tests shall be made by the Geotechnical Engineer of the compaction of each layer of fill. Density tests shall be made at intervals not to exceed two feet (2') of fill height provided all layers are tested. Where the sheeps foot rollers are used, the soil may be disturbed to a depth of several inches and density readings shall be taken in the compacted material below the disturbed surface. When these readings indicate the density of any layer of fill or portion thereof is below the required ninety percent (90%) density, the particular layer or portion shall be reworked until the required density has been obtained.
- 8) Buildings shall not span from cut to fill. Cut areas shall be over excavated and compacted to provide a fill mat of three feet (3').

#### FILL SLOPES

- 1) All fills shall be keyed and benched through all top soil, colluvium, alluvium, or creep material into sound bedrock or firm material where the slope receiving fill exceeds a ratio of five (5) horizontal to one (1) vertical, in accordance with the recommendations of the Geotechnical Engineer.
- 2) The key for side hill fills shall be a minimum of fifteen feet (15') within bedrock or firm materials, unless otherwise specified in the geotechnical report.
- 3) Drainage terraces and subdrainage devices shall be constructed in compliance with the ordinances of the controlling governmental agency, or with the recommendations of the Geotechnical Engineer.
- 4) The Contractor will be required to obtain a minimum relative compaction of ninety percent (90%) out to the finish slope face of fill slopes, buttresses, and stabilization fills. This may be achieved by either over-building

the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure which produces the required compaction.

- 5) All fill slopes should be planted or protected from erosion by methods specified in the geotechnical report and by the governing agency.
- 6) Fill-over-cut slopes shall be properly keyed through topsoil, colluvium, or creep material into rock or firm materials. The transition zone shall be stripped of all soil prior to placing fill.

#### **CUT SLOPES**

- 1) The Engineering Geologist shall inspect all cut slopes excavated in rock, lithified, or formation material at vertical intervals not exceeding ten feet (10').
- 2) If any conditions not anticipated in the preliminary report such as perched water, seepage, lenticular or confined strata of a potentially adverse nature, unfavorably inclined bedding, joints, or fault planes, are encountered during grading, these conditions shall be analyzed by the Engineering Geologist and Geotechnical Engineer; and recommendations shall be made to treat these problems.
- 3) Cut slope that face in the same direction as the prevailing drainage shall be protected from slope wash by a non-erosive interceptor swale placed at the top of the slope.
- 4) Unless otherwise specified in the geological and geotechnical report, no cut slopes shall be excavated higher or steeper than that allowed by the ordinances of the controlling governmental agencies.
- 5) Drainage terraces shall be constructed in compliance with the ordinances of controlling governmental agencies, or with the recommendations of the Geotechnical Engineer or Engineering Geologist.

#### **GRADING CONTROL**

- 1) Inspection of the fill placement shall be provided by the Geotechnical Engineer during the progress of grading.
- 2) In general, density tests should be made at intervals not exceeding two feet (2') of fill height or every five hundred (500) cubic yards of fill placed. These criteria will vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.

- 3) Density tests should also be made on the surface materials to receive fill as required by the Geotechnical Engineer.
- 4) All clean-out, processed ground to receive fill, key excavations, subdrains, and rock disposal must be inspected and approved by the Geotechnical Engineer prior to placing any fill. It shall be the Contractor's responsibility to notify the Geotechnical Engineer when such areas are ready for inspection.

#### CONSTRUCTION CONSIDERATIONS

- 1) Erosion control measures, when necessary, shall be provided by the Contractor during grading and prior to the completion and construction of permanent drainage controls.
- 2) Upon completion of grading and termination of inspections by the Geotechnical Engineer, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval of the Geotechnical Engineer or Engineering Geologist.
- 3) Care shall be taken by the contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of a permanent nature on or adjacent to the property.

# APPENDIX 'E'

**Architectural Development Plans** 

legal description:

Let I, of "ract No. 2'327, in the City of Les Angeles. County of Les Angeles, State of Colifornia, as per map recorded in Beak 654 Page( $\sigma$ ) 16 of Maps, in the Office of the County Recorder of size County.

#### Porce.

That contain of Lot 1, of first No. 21853 in the City of Lot Angeles County of Los Angeles. State of Cabifornia, at oir map recorded in Book 634 Page(s) it of Maps, in the Office of the County Perspect of said County, described as follows:

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#### PERSON 3

That portion of Let  $f_i$  of Treat No. 21653. In the City of Los Angeles, County at Las Angeles, State of California, as per map recorded in Book 634 Page(s) 5 of Naps, in the Office of the County Recorder of seld county, described as follows:

The bit of the moof Assembly Not head to draw of year Lot 1, 30% cores being the Madday and at the course in the boundary las of 300 Lot Moon on 30d mile as made of Note of 87.21. "Made 7.75 feet immore doing sold make any and the Property of 100 Lot Moon on 30d mile as any and the Property of 100 Lot 1, 10

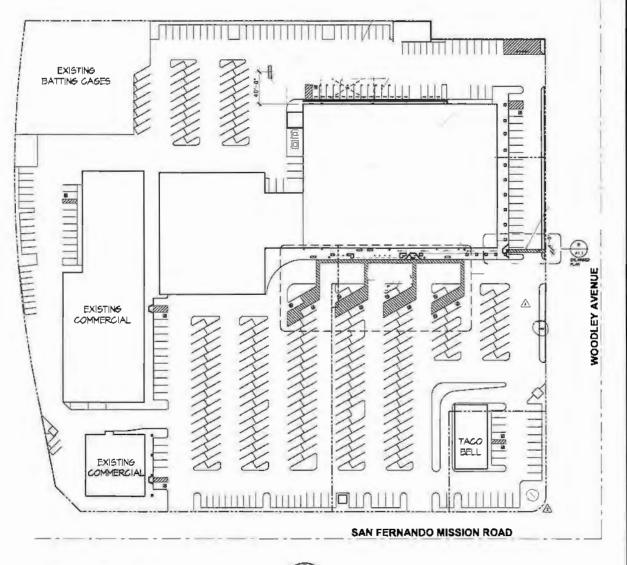
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#### Parcel 4

Parcel "A . of FereN Mas \_ 4 Ne \_ 720, in the C ty of Ucs Angeles County of Los Angeles, State of California, as per map files in Back 17 Page(e) 65 of Parce Naps in the Office of the County Records: of said County.

#### Surpet 6

Parcel "9", of Parcel Map L A. No. 739, in the Dity of Los Angeles, County of Les Angeles, State of California, as per map first in Bock 17 Page(s) 99 of Porce Nope, in the Office of the Caunty Resorder of spid County.



(E) SITE PLAN



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SITE PLAN

05/05/14

AS-BUILT 9-30-14

APPENDIX 'F'

**Engineering Analysis** 

# **SHORING PILE**

35.0 pcf

IC: <u>1732-64</u> CONSULT: <u>JF</u> CLIENT: **SAN FERNANDO ROAD** 

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CALCULATION SHEET #

CALCULATE THE DESIGN MINIMUM EQUIVALENT FLUID PRESSURE (EFP) FOR PROPOSED RETAINING WALLS. THE WALL HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE BACKFILL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE. USE THE MONONOBE-OKABE METHOD FOR SEISMIC FORCES.

# **CALCULATION PARAMETERS**

32 feet EARTH MATERIAL: ALLUVIUM RETAINED LENGTH SHEAR DIAGRAM: B-2 BACKSLOPE ANGLE: 0 degrees 100 pounds COHESION: 290 psf SURCHARGE: U Uniform 29 degrees SURCHARGE TYPE: PHI ANGLE: 125 pcf INITIAL FAILURE ANGLE: 10 degrees DENSITY SAFETY FACTOR: 1.25 FINAL FAILURE ANGLE: 70 degrees 10 degrees 2 feet PILE FRICTION INITIAL TENSION CRACK: 40 feet CD (C/FS): 232.0 psf FINAL TENSION CRACK:

PHID = ATAN(TAN(PHI)/FS) = 23.9 degrees

DESIGN EQUIVALENT FLUID PRESSURE

HORIZONTAL PSEUDO STATIC SEISMIC COEFFICIENT ( $k_h$ ) 0 %g VERTICAL PSEUDO STATIC SEISMIC COEFFICIENT ( $k_v$ ) 0 %g

#### **CALCULATED RESULTS** CRITICAL FAILURE ANGLE 55 degrees AREA OF TRIAL FAILURE WEDGE 350.2 square feet TOTAL EXTERNAL SURCHARGE 1700.0 pounds 45477.4 pounds WEIGHT OF TRIAL FAILURE WEDGE NUMBER OF TRIAL WEDGES ANALYZED 2379 trials LENGTH OF FAILURE PLANE 33.1 feet DEPTH OF TENSION CRACK 4.9 feet HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK 19.0 feet CALCULATED THRUST ON PILE 17439.4 pounds CALCULATED EQUIVALENT FLUID PRESSURE 34.1 pcf

THE CALCULATION INDICATES THAT THE PROPOSED SHORING PILES MAY MAY BE DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 35 POUNDS PER CUBIC FOOT. THE FLUID PRESSURE SHOULD BE MULTIPLIED BY THE PILE SPACING.

# **RETAINING WALL**

IC: <u>1732-64</u> CONSULT: <u>JF</u> CLIENT: **SAN FERNANDO ROAD** 

CALCULATION SHEET #

CALCULATE THE DESIGN MINIMUM EQUIVALENT FLUID PRESSURE (EFP) FOR PROPOSED RETAINING WALLS. THE WALL HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE BACKFILL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE. USE THE MONONOBE-OKABE METHOD FOR SEISMIC FORCES.

# **CALCULATION PARAMETERS**

32 feet EARTH MATERIAL: ALLUVIUM WALL HEIGHT SHEAR DIAGRAM: B-2 BACKSLOPE ANGLE: 0 degrees COHESION: 290 psf SURCHARGE: 0 pounds U Uniform 29 degrees SURCHARGE TYPE: PHI ANGLE: 10 degrees DENSITY 125 pcf INITIAL FAILURE ANGLE: SAFETY FACTOR: 1 FINAL FAILURE ANGLE: 70 degrees 10 degrees 2 feet WALL FRICTION INITIAL TENSION CRACK: 40 feet CD (C/FS): 290.0 psf FINAL TENSION CRACK:

PHID = ATAN(TAN(PHI)/FS) = 29.0 degrees

HORIZONTAL PSEUDO STATIC SEISMIC COEFFICIENT ( $k_h$ ) 0.291 %g VERTICAL PSEUDO STATIC SEISMIC COEFFICIENT ( $k_v$ ) 0 %g

#### **CALCULATED RESULTS**

CRITICAL FAILURE ANGLE 45 degrees AREA OF TRIAL FAILURE WEDGE 499.5 square feet 0.0 pounds TOTAL EXTERNAL SURCHARGE WEIGHT OF TRIAL FAILURE WEDGE 62437.5 pounds NUMBER OF TRIAL WEDGES ANALYZED 2379 trials LENGTH OF FAILURE PLANE 38.2 feet DEPTH OF TENSION CRACK 5.0 feet HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK 27.0 feet CALCULATED HORIZONTAL THRUST ON WALL 25231.8 pounds

THE CALCULATION INDICATES THAT THE STATIC DESIGN FORCE IS HIGHER THAN THE SEISMIC FORCE AND THEREFORE A SURCHARGE DOES NOT NEED TO BE ADDED.

APPENDIX 'G'

Research

| APPLICATION FOR REVIEW SHE   | THE RESIDENCE OF THE PARTY OF T |
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|  | ind 3 copies of application with Items (1) through (1) comments.   |
| Tract 7  Bik Lots 7  Address 5045 Slavson Au  City A CA Zip  Phone (Daytime) (213 721 - 39 | PROJECT) GOTS CAS Turned Address  Address  City  Phone (Daytime)  7 1/3 - 78/4   |
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#### STONEY-MILLER CONSULTANTS INC.

#### GLOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

November 30, 1989

Ericason Radio Systems
13575 Larwin Circle
Santa Fe Springs Calif

Project No: 10327-00 Report No: 9-1034

Santa Fe Springs, California 90670

Attention:

Mr. Ron North

Subject:

. 7

()

 $\Box$ 

Laboratory Testing

Call Site 142.1

Granada Hills, California

Reference:

"Geotechnical Investigation, Cell Site 142.1, Woodley Avenue and San Fernando Mission Blvd, Granada Hills, California, Prepared by

Granada Hills, California, Prepared by Stoney-Miller Consultants, Inc., deted July 17, 1989, Project No. 10327-00; Report No. 3-0714

#### Gentlemen:

In accordance with your request, we are herewith responding to the City of Los Angeles Department of Building and Sefety building sheet regarding the use of an approved soil testing laboratory for the subject project. As indicated on the attached latter; the soil testing reported in our referenced report was combined by LF Geotechnical, Inc., which is an approved laboratory. There is a variable for presentation in our referenced report. There is a variable in the gradation due to an error in reploting the results. The attached test results are correct and the recommendations presented in our referenced report are applicable. The changes testing (sulfate test) was completed by Anaheim Test Laboratory.

November 30, 1989

Project No. 10827-00 Report No. 9-1034 Page No. 2

This opportunity to be of service is appreciated. If you have any questions, please call.

Michael J. M. Geotechnical

Respectfully submitted,

STONEY-MILLER CONSULTANTS, INC.

Sary P. Stoney, C.E.G. 938

Principal

GF8:MJM:tlw

Distribution: Addressee (1)

City of Los Angeles (2)

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# APPLICATION FOR SELECTION OF TRADESCRIPTION Address all communications to the Grading Olivinion: Ducies Angeles California 90912-4288 Huns Jame Gode 213/486 B Obtain address approved from the discontinues of Febric Works page to called Submit 2 copies (4) for facilitatively some), claresorts and 3 copies of access Check should be made to the Dansteness of Building and Safety. LEGAL DESCRIPTION PAREL Tract: 8lk APPLICAN Prione (Daytime) Reportis) Report Prepared by Date(s) Storm Damage Proposed Under Construction Previous site reports? \_\_\_\_\_!f yer, give date(s) of report(s) and name of company(s) who prepared report(s). Dates Signature of applicant 4010 Malo alacer Position (DEPARTMENT USE ONLY) REVIEW REQUESTED & PROCESSING FEE5 REVIEW REQUESTED & PROCESSING FEES Foundation Investigation Seismology report per 91.2305(d) **Environmental Assessment** Soils Engineering Geology **Import-Export Route** Combined Soils Engr. & Geol. Division of Land Supplemental Sub-total One-Stop Surcharge Combined Supplemental Of APPROVED WITH CONDITIONS THE REPORT IS TOTAL FEE TO NOT APPROVED DEPAR MEN' ACTION BY: For Gealogy For Spile & Four Date Oate Conditions of Approval Reasons for Non-Approval See Altached letter Supplem Attached

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BLOCKI LOT

JOB ADDRESS:

July 17, 1960

Ericason Radio Systems 13575 Larwin Circle

Santa Fe Springs, California 90870

Attention:

Mr. Ron Horth

Subject:

Geotechnical Investigation /2275

Call Site 142.1

Woodley Avenue and San Fernando Mission Bouleward:

Project No:

9-6375

Report No:

Granada Hills, California

#### Gentlemen:

In accordance with your request, we have completed a geotechnical: investigation for the cellular telephone site identified as Los Angeles Cellular Telephone Company Cell Site 142.1, formthem. Ericsson Radio Systems Company. The purpose of this investigation was to determine the geotechnical suitability of the site for the intended use, as well as to provide geotechnical. design parameters for the proposed improvements.

Our investigation was performed in June of 1989, and the scores of services consisted of: field investigation, laboratory testing, engineering and geologic analysis of the field and labor transdata, and preparation of this report.

This investigation was based on the scope of services outlined in our Proposal No. 9334, dated April 12, 1989. The scope: of ... services for this investigation is as presented in our proposal.

#### DESCRIPTION OF SITE

The site is located adjacent to an existing recreational behims: cage complete along the northwest corner of a shopping control near the intersection of San Fernando Mission Boulevard and Woodlage Avenue, one mile south of Mission Hills, within the Sangara Valley, Los Angeles County, California. The topographic

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#### STONEY-MILLER CONSULTANTS, INC.

#### GEOTECHNICAL ENGINEERING & ENGINEERING GEOLOGY

July 17, 1989

Ericsson Radio Systems 13575 Larwin Circle Santa Fe Springs, California 90670 Project No: 10327-00 Report No: 9-0778

Attention:

Mr. Ron North

Subject:

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Geotechnical Investigation

Cell Site 142.1

Woodley Avenue and San Fernando Mission Boulevard

Granada Hills, California

#### Gentlemen:

In accordance with your request, we have completed a protection investigation for the cellular telephone site identified to Los Angeles Cellular Telephone Company Cell Sits 142.1. For the Ericsson Radio Systems Company. The purpose of this investigation was to determine the geotechnical suitability of the site for the intended use, as well as to provide protections design parameters for the proposed improvements.

Our investigation was performed in June of 1989, and the source of services consisted of: field investigation, laboratory tending engineering and geologic analysis of the field and laborator, data, and preparation of this report.

This investigation was based on the scope of services outlined in our Proposal No. 9334, dated April 12, 1989. The scope of services for this investigation is as presented in our proposal.

## DESCRIPTION OF SITE

The site is located adjacent to an existing recreational batting cage complex along the northwest corner of a shopping center near the intersection of San Fernando Mission Boulevard and Woodland Avenue, one mile south of Mission Hills, within the San Fernando Valley, Los Angeles County, California. The topographic and

# INSULTANTS INC.

& ENGINEERING GEOLOGY

Project No: 10327-00 Report No: 9-0778

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mpleted a quotechnical te identified as Site 142.1, for the se of this sical suitability of to provide quotechnical sents.

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recreational batting a shopping center near ulevard and Woodley thin the San Fernando a topographic and

Project No: 10327-0 Report No: 9-0778 Page No: 2

geographic relationship of the site to the surrounding area is shown on the Location Map, Figure 1.

Specifically, the site consists of a leased, 12-foot wide by 30-foot long, rectangular shaped portion of the existing asphalt-covered parking lot along the extreme northwest corner of the shopping center. The site is bounded on the north by the batting cages, on the west by channelized Bull Creek, and on the east and south by the shopping center. The site plan for the proposed monopole facility shelter shows that the structure will be located adjacent to a 17 foot high chain link fence dividing the batting cages and the shopping center. Moreover, the plan shows that the 60-foot high monopole structure will be located on the north side of the shelter, while a 10-foot wide by 20-foot long parking easement will be constructed along the south side for maintenance vehicles. During our investigation, it was observed that an existing underground flow channel extends in an east-west direction directly beneath the proposed facility shelter and outlets within the channelized Bull Creek located 15 feet what the site. The site slopes gently to the east toward an existing parking lot.

# PROPOSED CONSTRUCTION

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It is our understanding that construction for the proposed Monopole Cellular Relay Station Facility will consist of a 50-foot Monopole Cellular Relay Station with a pre-fabricated utility building placed on a thickened edge, 12-foot by 30-foot concrete slab. In addition, a 10-foot wide by 20-foot long parking easement is planned along the southern side of the shelter, with access provided via San Fernando Mission Soul-ward or Woodley Avenue.

#### SUBSURFACE COMDITIONS/GEOLOGIC SETTING

Subsurface conditions were explored by drilling one boring to a maximum depth of 41.5 feet. The approximate location of the boring is shown on the attached Plot Plan, Figure 2. The bering was drilled with a truck mounted, 8-inch diameter flight engage. Drilling of the boring was observed by our field geologist the logged the soils and obtained bulk and relatively undisturbed samples for identification and laboratory testing. The log of Borings are presented in Figures 3 and 4. The drill hole was located in the field by pacing from known landmarks. The location as shown is, therefore, within the accuracy of such measurement.



## STONEY-MILLER CC

#### **GEOTECHNICAL ENGINEERING**

July 17, 1989

Ericsson Radio systems 13575 Larwin Circle Santa Fe Springs, California 90670

Attention:

Mr. Ron North

Subject:

Geotechnical Investigation

Cell Site 142.1

Woodley Avenue and San Fern-Granada Hills, California

#### Gentlemen:

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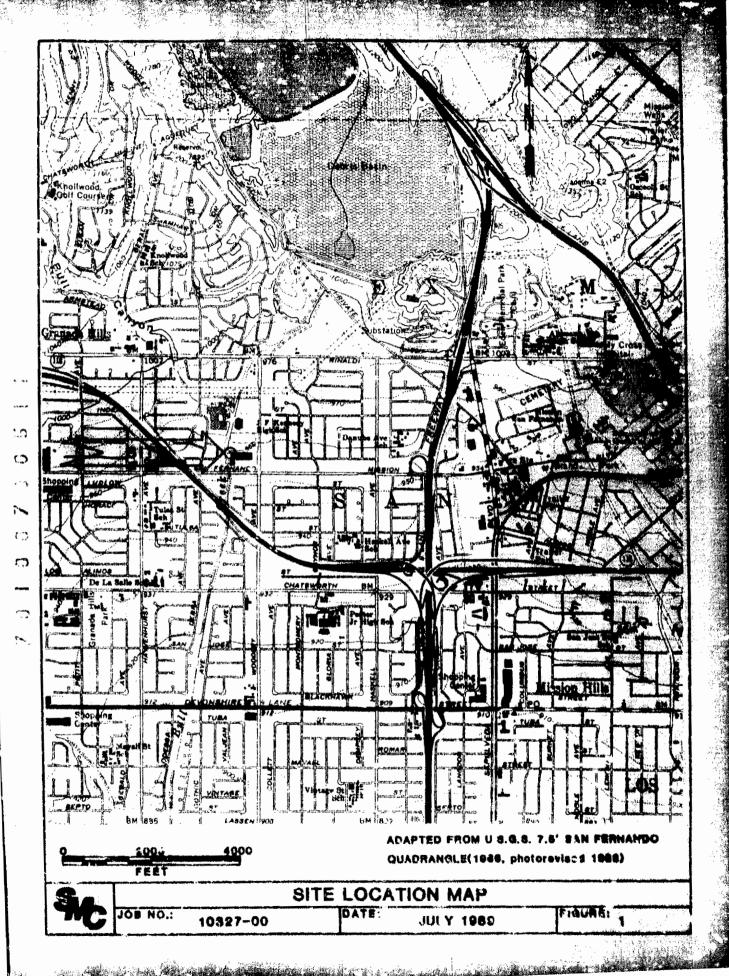
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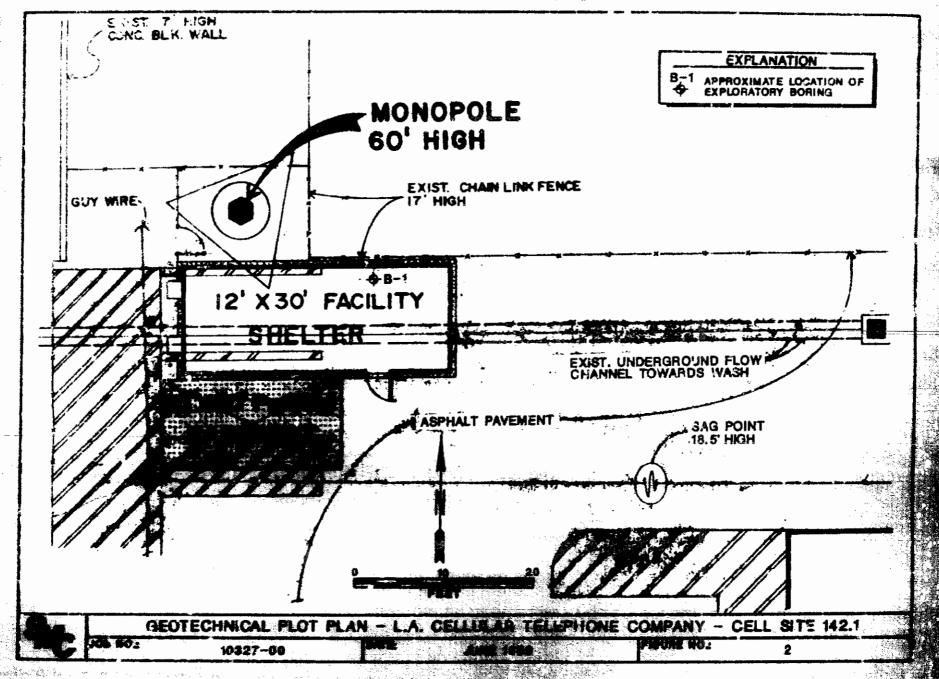
Our investigation was performed in June of services consisted of: field investigation engineering and geologic analysis of the fidata, and preparation of this report.

This investigation was based on the scope our Proposal No. 9334, dated April 12, 198 services for this investigation is as presented.

#### DESCRIPTION OF SITE

The site is located adjacent to an existing cage complex along the northwest corner of the intersection of San Fernando Mission B Avonue, one mile south of Mission Hills, w Valley, Los Angeles Courty, California. T





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Project No: 10327-up Report No: 9-0778 Page No: 3

Our exploratory boring completed on the lot indicates that the site is underlain by alluvium. The alluvium was deposited during flood episodes within recent times (<10,000 years) before improvements to Bull Creek, and generally consists of slightly moist, medium dense to very dense, brown, silty sand, gravelly sand, clayey silts, and sandy silt.

Subsurface conditions encountered beneath the asphalt-covered parking area consisted of approximately 20 feet of slightly moist, medium dense to very dense, brown, fine to medium-grained, silty sand with some coarse-grained sand and a trace of fine gravel and occasional interlayered fine-grained sand lenses. A gradational change occurs in the soil horizon beneath the upper silty sand and consists of slightly moist, dense to very dense, orange-brown, fine- to coarse-grained, gravelly sand interlayers with lenses of coarse-grained sand and sandy gravel to a depth of approximately 27.0 feet. Below the gravelly sand horizon, slightly moist to moist, hard, dark brown, clayer silt with coarse-grained sand extends to 39 feet where a gradational change occurs to predominantly a fine-grained, sandy silt to a depth of 41.5.

Because of the natural in-place density and granular nature of the gravelly alluvium materials, collection and recovery of relatively undisturbed ring samples was not satisfactorily completed. Groundwater was not encountered in our boring to a depth of 41.5 feet, but caving of the boring sidewalls did contribelow 29 feet. Upon completion of our exploratory excevation, the boring was backfilled with the native soil materials and the opening asphalt patched.

# REGIONAL GEOLOGIC SETTING

The subject property is located in the San Fernando Valley, a structural depression filled with up to 100 to 250 feet of Quaternary-age alluvium within this portion of the valley. The San Fernando Valley lies 20 miles northwest of the center of Los Angeles, and is bounded on the north by the Santa Susana and San Gabriel Mountains, on the east by the Verdugo Hills, on the south by the Santa Monica Mountains, and on the west by the Hills. The majority of the alluvial material deposited in this area adjacent to Mission Hills was derived from these adjacent highlands. The city of Granada Hills occupies the northcentral portion of the San Fernando Valley.

#### GEOLOGIC UNIT - ALLUVIUM

Alluvium is a hydraulically transported and deposited sediment which accumulates along drainage courses. The sediments of this

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portion of the San Fernando Valley were transported from the San Gabriel Mountains, mainly by Bull Creek and Pacoima Wash, as well as from ephemeral braided streams originating in the Little Tujunga Canyon located approximately 6.5 miles east of the site. The thickness of alluvium varies throughout the plain; however, data from oil and gas expioration wells indicate the thickness of sediment at the site to be approximately 100 to 200 feet, with Holocene-age deposits comprising the upper 20 feet.

### **SEISMICITY**

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No active faults are known to exist on or adjacent to the site and, thus, no hazard due to ground rupture is anticipated. The San Gabriel Fault Zone is located north of the site, approximately 7.5 miles, while the site lies approximately 3.5 miles southeast of the Santa Susana Fault Zone. Additionally the site lies approximately 24 miles north and 35 miles continued of the Newport-Inglewood and Whittier Fault Zones, respectively in the principal seismic hazard to be considered for design of is seismically induced ground shaking resulting from additional on distant faults. Cracking of the ground due to shaking distant events is not considered a significant hazard. In general, design of structures at the site should design for earthquake design in the area, and standard practices of the Structural Engineers Association of California.

#### LABORATORY TESTING

#### A. <u>Classification</u>

Soils were classified visually according to the Unified soil Classification System. Classification was supplemented with Index Testing, such as Particle Size Analysis. Moisture content and dry density determinations were not made because representative undisturbed samples were not recovered.

Classifications are shown in the Log of Borings, Figures 3 and 4.

The following sampling and testing technique was used to evaluate the subsurface conditions:

1. The in-place relative density and/or consistency of the soils were assessed by means of Standard Penetration. Tests (SPT). The corresponding N-V-1uc are shown on the logs. Samples from the SPT spoon were retrieved for detailed soil classification and laboratory testing.

Project Se: 1012-78 Report No: 9-0778 Page No: 5

2. Relatively undisturbed soils samples were obtained by means of a drive sampler, the hammer weight and drop being as for the SPT. The corresponding blows per foot of penetration are indicated on the logs.

## B. Particle Size Analysis

Particle size analyses, consisting primarily of mechanical analysis (sieve), were performed on representative samples of the on-site soils in accordance with ASTM: D 422-63. Test results are presented on Figure 5.

## C. Sulfate

Sulfate tests were performed on a representative simple of the on-site soils. The laboratory standard uses the California 417A The test results are presented bases

| Test      | Soil Sulfate Degree of Classification Content (3) Correlation |    |
|-----------|---|----|
| Location  | Classification Content ()                                     |    |
|           |   |    |
| B-1 61-3' | Silty SAND 0.0173 Low   | 17 |

#### D. Expansion

An expansion test was performed on a representative resolution sample of the on-site soils in accordance with the Uniform Building Code Standard No. 29-2. The test result is presented below:

| Test       | Soil           | Excansion Expansion   |
|------------|----------------|---|
| Location   | Classification | The second se |
| B-1 @ 1-3' | silty SAND     | O Yeary Low   |

# CONCLUSIONS AND RECOMMENDATIONS

From a geotechnical standpoint, it is our opinion that the site is suitable for the proposed construction provided the conclusions and recommendations presented in this report are incorporated into the project design, plans, and specifications. Presented herein are detailed recommendations for site preparation and monopole design parameters.

Based on the findings presented in this report and provided the following recommendations are complied with, it is our opinion that the proposed residence is not subject to a geologic hazard

Project No: 10327+05 Report No: 9-0778 Page No: 6

from landslides, settlement, or slippage. It is also our epinion that the proposed construction will not adversely affect the geologic stability of the site or adjacent properties per the appropriate city codes.

# A. Site Grading

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## 1. General

All site grading should be accomplished in accordance with the requirements of the city of Granada Hills, the recommendations of this report, and the attached Standard Grading Guidelines.

## 2. Site Clearing

The site should be cleared of any vegetation, description asphalt paying and organic matter. Debris and release from clearing and pavement dismantling operations should be removed from the site.

## 3. Subgrade Preparation

Due to the anticipated disturbed nature of the drests surface soils, we recommend that the subgrade soils exposed after removal of the asphalt paving be overexcavated to 6 inches below proposed subgrade elevation to a minimum of 5 feet beyond the building lines, or where existing development persits. Depressions resulting from the removal of unsuitable material or man-made structures which extend below existing grade should be backfilled with properly compacted material. Prior to the placement of fill the bottom of the excavation should be scarified inches, moisture conditioned to above optimum selectors content, and compacted to at least 90 percent relative compaction, based on ASTM: D 1557-78.

#### 4. Fill Soils

The on-site soils may be used for backfill provided they are free of debris, organic matter and cobbles greater than six inches.

Any soils imported to the site for use as select fill or subgrade materials beneath footings and floor slabs should be predominantly granular and approved by the geotechnical engineer prior to importing. Laboratory testing necessary for approval of import sources may

Project No: 10397-0 Report No: 9\*0774 Page No: 7

require 24 to 48 hours. The geotechnical engineer should be notified of import locations a minimum of two days prior to its proposed use.

#### 5. Compaction

Fill materials should be placed in loose lifts not exceeding eight inches, moisture conditioned to near optimum, and compacted to 90 percent minimum relative compaction (ASTM: D 1557-78).

# B. Foundation and Slab Recommendations

#### 1. General

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The following recommendations are based on the geotechnical data available to us at the time of severe review and are subject to revision based on possible actually encountered in the field.

Our recommendations are considered to be gamestly consistent with the standards of practice. The based on both analytical methods and empirical methods and empirical methods are conditions. Reinforcement recommendations are considered the minimum necessary for the likely soil conditions and are not intended to supersede the derigation of the structural engineer or criteria of governing agencies.

#### Foundations

#### a. Footing Types

We understand that a thickened edge slab is proposed to provide support for the utility building. The thickened edge should be founded a minimum of 12 inches below the lowest adjacent finished subgrade and have a minimum width of is inches. Reinforcement in exterior and interior continuous footings should consist of a minimum of two No. 4 reinforcing bars, placed one at the Lopand one at the bottom of the footing.

#### b. Soil Bearing Pressure

Footings may be designed for an allowable deadplus-live load bearing pressure of 1,500 pounds

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Project No: 10327-00 Report No: 9-0778 Page No: 8

per square foot, with a 33 percent increase for short-term wind or seismic loads. Where located adjacent to utility trenches, footings should extend below a one-to-one plane projected upward from the inside bottom corner of the trench.

#### c. Settlement

If footings are sized for the recommended bearing pressures, the total and differential settlements between adjacent similarly landed columns are not expected to exceed one-half inch.

# d. Monopole Design Parameters

Caisson design for the monopole structure should be accomplished in accordance with the applicable provisions of the City of Los Angeles Building Code, 1985 edition. Piles may be designed assuming an arbitrary point of fixity at 5 feet below lowest adjacent finished subgrade. Design criteria should be in accordance with Section 2907(g)2.

Table 29-B, assuming the soil condition noted on the boring. To resist axial loads, an average frictional resistance of 400 pounds per square foot of contact area between the concrete list and the surrounding soil may be utilised. The weight of the cast-in-place pile may be neglected in computing bearing capacity. The resistance to uplift forces would be one-half of the frictional resistance noted for axial loads.

# e. Lateral Load Resistance (For Buildings)

Lateral loads against buildings may be resisted by friction between the bottom of Soctings and the supporting soils, and by lateral bearing. In accordance with Table 29-B, footings may be designed for an allowable lateral bearing of 150 pounds per square foot per foot of depth, and for a lateral sliding resistance of 130 pounds per square foot.

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#### 3. Floor Slabs

Although there is no known economical method of totally preventing movement due to highly expansive soils, current state-of-the-practice in the southern California area dictates substantial reinforcement, slab thickening, and pre-soaking of subgrade soils as methods of minimizing the effects of expansive soils. Reasonable mitigation of expansive soil effects is considered feasible from a geotechnical viewpoint utilizing such methods, although it is noted that some future distress cannot be precluded when building on expansive soils.

Floor slabs should be at least 5-inches actual thickness. Slabs should be underlain by a capillary break consisting of at least 2-inches of clean send or gravel. A suitable vapor barrier should overlay the capillary break, and should in turn be overlain by a least 1 inch of sand to decrease concrete suring problems.

Minimum slab reinforcement should consist of 5x5-10/10 welded wire mesh placed at mid-height of the slab. Slab reinforcement should be reviewed and approved by the structural engineer.

#### 4. Pre-Soaking Beneath Floor Slabs

No pre-soaking of slab subgrade soils is required.

However, subgrade soils should be thoroughly moistened prior to pouring concrete.

#### C. Foundation Inspection

All excavations should be observed by the geotechnical engineer prior to placement of forms, reinforcement, or concrete, for verification of conformance with the intention of these recommendations. All excavations should be trimed neat, level, and square. All loose or sloughed material should be removed prior to the placement of concrete. Materials from footing excavations should not be spread in slab-on-grade areas unless compacted.

#### D. Surface and Subsurface Drainage

Groundwater was not encountered during our investigation that would affect the finished pad. The impact of heavy irrigation can artificially raise existing groundwater

Project Mo: 10357470 Report No: 5-6772 Page No: 10

tables or create perched water conditions. This may result in scepage or shallow groundwater conditions where previously none existed.

# E. Trench Backfill

It is our opinion that utility tranch and/or wall backfill consisting of the on-site material types could be best placed by mechanical compaction to a minimum of 90 percent of the laboratory maximum density.

Exterior trenches extending below a 1:1 (horizontal: vertical) projection from the cuter edge of foundations should be mechanically compected to a minimum of 90 percent of the laboratory maximum density.

# F. Plan Formulation and Review

In order to help assure conformance with recommodations of this report, and as a condition of the use of this report, the undersigned should review foundation and aits plans prior to submission for issuance of permits. From should be signed by this office as conforming with the recommendations of this report.

## G. Additional Grading

Prior to the commencement of grading operations on site, including backfilling of trenches and retaining walls, the geotechnical engineer should be notified at least two working days in advance in order to schedule appropriate observation and testing services as needed.

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Our services were performed using the degree of care and atill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers and peologists practicing in this er similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

The samples taken and used for texting, the observations made and the in-place field testing performed are believed representative of the entire project; however, soil and genlagio conditions wan vary significantly between tested or observed locations.

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Preject No: 10027-00 Report No: 9-07/0 Page No: 11

As in most projects, conditions revealed by excavation may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by the project geotechnical engineer and geologist and designs adjusted as required or alternate designs recommended.

This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the plans, and the necessary steps are taken to see that the contractor and subcontractors sarry out such recommendations in the field.

This firm does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and we cannot be responsible for other than our own personnel on the site; therefore, the safety of others is the responsibility of the contractor. The contractor should notify the owner is the considers any of the recommended actions presented herein to be unsafe.

The findings of this report are valid as of the present data.

However, changes in the conditions of a property can cour size the passage of time, whether they be due to natural processes of the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our central. Therefore, this report is subject to review and should not be relied upon after a period of three years.

Project we: 18637-08 Raport do: 9-6776 Page No: 12

This opportunity to be of service is appreciated. if you have any questions, please call.

Respectfully submitted,

STONEY-MILLER CONSULTANTS, INC.

Gary . Stoney, C.E.G. 938

Principal

Michael 3 Mi

Geotechnical Engl

JFH: je

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Attachment:

Location Map - Figure 1

Plot Plan - Figure 2

Logs of Borings - Figures 3 and 4

Laboratory Test Results (Sieve Analysis)

Figure 5

Appendix, Standard Grading Guidelines

Distribution:

Addressee (5)

Tower Structures (1)

Attn: Steve Hopkins

Los Angeles Cellular Telephone Company (1

Attn: Mr. Ray Connors

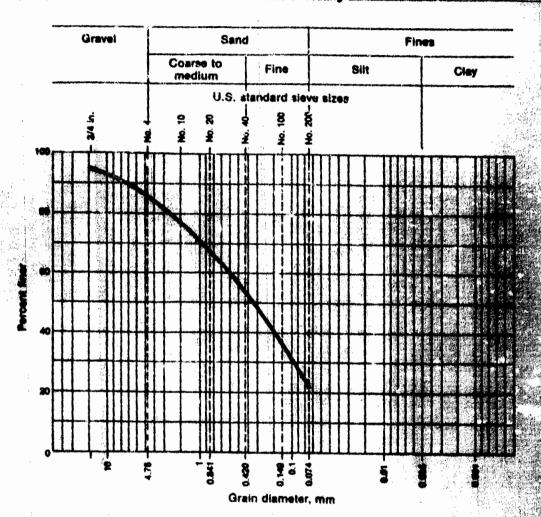
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| I DEPTH<br>O (FEET) | BRAPHIC LOB | CLASSIFICATIO | BLOW8/FOOT       | SAMPLE SAMPED | SIJANYS NIOS | MOISTURE<br>CONTENT (S | ADA) ALISMAD<br>BC BOV 14 NI | BGRING NO<br>DESCRIPTION  | LABORATO <b>S</b><br>TEST     |
| -                   |             | WC_           |                  | Ĺ,            |              |                        |                              | 4" A.C. OVER 2" BASE  |                               |
|                     |             |               | 10/16<br>16/45   |               |              |                        |                              | Alluvium—Qal Brown, fine—grained, silty SAND with some coarse—grained sand and fine gravel. Medium dense, slightly moist, lensoidal. @1', Sample not recovered @5', Sample not recovered; grain- size increasing to morely medium. Gravel content and clast size increasing. @10', Interlayered fine—grained sand lenses. @18', Gradational change. | Sieve<br>Empansion<br>Sulfate |
| 20                  |             | SW            | 20/<br>23/<br>28 |               |              | - No. 107              |                              | Orange-brown, fine- to coarse-<br>grained, gravelly sand, Dease<br>to very dense, slightly subst;<br>lensoidal. Gravel is 1/4" to<br>5" i, subangular to subrounded,<br>metamorphic and granitic classs.  |                               |
| 30-                 |             | ML            | 13/<br>22/<br>28 |               |              |                        | 97 (31)                      | e27', Dark brown, clayey SILT with some coarse-grained sand. Hard, slightly moist to moist.   |                               |
| 38                  |             |               |                  |               |              |                        |                              | @39', Gradational change to<br>predominantly silt.  |                               |

LOGGED BY: GROUND ELEVATION: GRAPHIC LOG BULK CAMPLE BLOWS/FOOT MOISTURE CONTENT (S) DEPTH (FEET) BORING NO. 1 (cont'd) TEST DESCRIPTION 16/ ALLUVIUM (Cont'd) Brown, very fine-grained sandy silt. Medium dense, slightly moist, lensoidal. Total Pepth 41.5' No Groundwater Caving Below 29' Boring Backfilled Asphalt Patched 50  $\Box$ () 1 JOS NC.: 10327-00 LOG OF BORING

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| CHANADA HTT. C                     | Boring No. 1    |         |     |
| Description of Soil SILTY_SAND     | Depth of Sample | 1-3*    |     |
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| Visual soil description Br | own, fine-grained, | silty sand with so   | 00           |
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|                            | and fine gravel.   |                      | S) A STANSON |
|                            |                    |                      |              |
| Soil classification:       |                    |                      |              |
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#### APPENDII

# STANDARD GRADING GUIDELINES

## GENERAL

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These Guidelines present the usual and minimum requirements for grading operations inspected by Stoney-Miller Consultants, Inc., (SMC) or its designated representative. No deviation from these guidelines will be allowed, except where specifically superseded in the soils report signed by a registered geotechnical engineer.

The placement, spreading, mixing, watering and compaction of the fills in strict accordance with these guidelines shall be the sole responsibility of the contractor. The construction, excavation, and placement of fill shall be under the direct observation of the geotechnical engineer or any person or persons employed by the licensed geotechnical engineer signing the seil report. If unsatisfactory soil-related conditions exist, the geotechnical engineer shall have the authority to reject the compacted fill ground and, if necessary, exception equipment will be shut down to permit completion of despection. Conformance with these specifications will be discussed in the final report issued by the geotechnical engineer.

# SITE PREPARATION

All brush, vegetation and other deleterious material such as rubbish shall be collected, piled and removed from the site prior to placing fill, leaving the site clear and free from objectionable material.

Soil, alluvium, or rock materials datermined by the geot inical engineer as being unsuitable for placement in comparted fills shall be removed from the site. Any material incorporated as part of a compacted fill must be approved by the geotechnical engineer.

The surface shall then be plowed or scarified to a minimum depth of 6 inches until the surface is free from uneven features that would tend to prevent uniform compaction by the equipment used. After the area to receive fill has been cleared and scarified, it shall be disced or bladed by the contractor until it is uniform and free from large clods, brought to the proper moisture contant and compacted to minimum requirements. If the scarified long is greater than twelve inches in depth, the excess shall be removed and placed in lifts restricted to six inches.

Any underground structures such as cess, ols, cisterns, mining shafts, tunnels, septic tanks, wells, pipe lines or others not located prior to grading are to be removed or treated in a manner prescribed by the geotechnical engineer.

## KATERIALS

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Materials for compacted fill shall consist of materials approved by the geotechnical engineer. These materials may be excavated from the cut area or imported from other approved sources, and soils from one or more sources may be blended. Fill soils shall be free from organic vegetable matter and other unsuitable substances. Normally, the material shall contain no rocks or hard lumps greater than 6 inches in size and shall contain at least 50 percent of material smaller than 1/4 inch in size. Materials greater than 4 inches in size shall be placed so that they are completely surrounded by compacted fines; no nesting of rocks shall be permitted. No material of a perishable, spondy, or otherwise of an unsuitable nature shall be used in the fill soils.

Representative samples of materials to be utilized as compacted fill shall be analyzed in the laboratory by the geotechnical engineer to determine their physical properties. If any neterial other than that previously tested is encountered during ording, the appropriate analysis of this material shall be conducted the geotechnical engineer as soon as possible.

# PLACING, SPREADING AND COMPACTING FILL MATERIAL

The material used in the compacting process shall be evenly spread, watered, processed and compacted in thin lifts not to exceed six inches in thickness to obtain a uniformly dense layer.

When the moisture content of the fill material is below that specified by the geotechnical engineer, water shall be added by the contractor until the moisture content is near optimum as specified.

When the moisture content of the fill material is above that specified by the geotechnical engineer, the fill material shall be aerated by the contractor by blading, mixing, or other satisfactory methods until the moisture content is near optimum as specified.

After each layer has been placed, mixed, and spread evenly, it shall be thoroughly compacted to 90 percent of the maximum laboratory density in compliance with ASTM D: 1557-70 (5 layers). Compaction shall be accomplished by sheepsfoot rellers, vibratory rellers, multiple-wheel pneumatic-tired rollers, or other types of acceptable compacting equipment. Equipment shall be of such design that it will be able to compact the fill to the specified density. Compaction shall be continuous over the entire area and the equipment shall make sufficient passes to obtain the desired density uniformly.

A minimum relative compaction of 90 percent out to the finished slope face of all fill slopes will be required. Compacting of the slopes shall be accomplished by backrolling the slopes in increments of 2 to 5 feet in elevation gain or by overbuilding and cutting back to the compacted inner core, or by any other procedure which produces the required compaction.

## GRADING INSPECTIONS

The geotechnical engineer shall inspect the placement of fill during the grading process and will file a written report upon completion of grading stating his observations as to compliance with these specifications.

One density test shall be required for each 2 vertical feet of fill placed, or one for each 1,000 cubic yords of fill, whichever requires the greater number of tests.

Any cleanouts and processed ground to receive fill must be inspected by the geotechnical engineer and/or engineering geologist prior to any fill placement. The contractor shall notify the geotechnical engineer when these areas are ready for inspection.

## PROTECTION OF WORK

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During the grading process and prior to the complete construction of permanent drainage controls, it shall be the responsibility of the contractor to provide good drainage and prevent ponding of water and damage to adjoining properties or to finished work on the site.

After the geotechnical engineer has terminated his inspections of the completed grading, no further excavations and/or filling shall be performed without the approval of the geotechnical engineer, if it is to be subject to the recommendations of this report.



# LF CHOTECHING AL MAR

July 13, 1989

Stoney-Miller Consultants, Inc. 14 Hughes, Suite B-101 Irvine, CA 92718

Attention: Mr. Gary Stoney

Project No. 9020-27 File No. 9-137

RE: LABORATORY TESTING SERVICES Your Reference No. 10327-00 Ericsson Radio

# Gentlemen:

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Submitted herewith are results of tests performed on sell states identified as B-1 @ 1'-3' delivered to our laboratory. The tests included:

- (1) One Grain Size Analysis
- (2) One Expansion Index Test

All tests were performed by qualified personnel in our laboratory (City of Los Angeles Testing Agency License No. 10037).

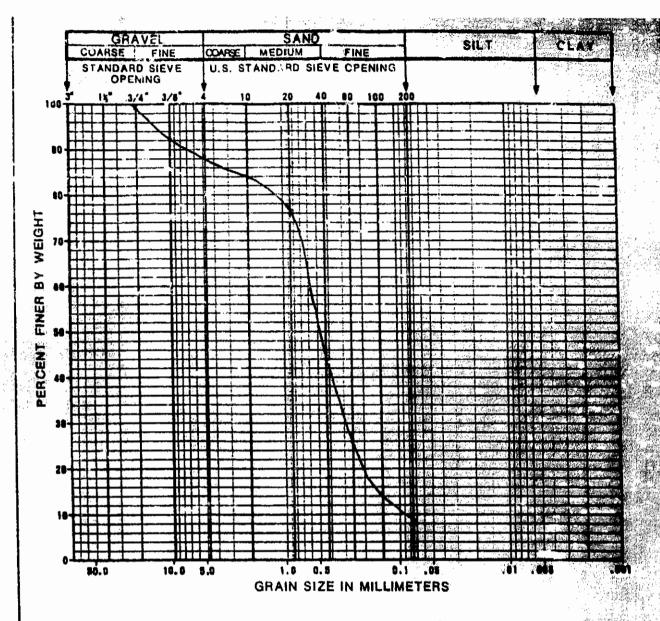
Respectfully submitted,

LF Geotechnical, Inc.

Donald J. Peiler

Vice President, Operations

5150 EAST LA PALMA AVENUE, SUITE 114 M ANAHEIM HI! LS, CALIPORNIA 92607 M (714) 777-1000 M MALIFIN STROSH 29030 VENTURA SCULEMARO M CALABASAS, CALIFORNIA 91302 M (516) SOCIATION AND MALIFORNIA



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EXPANSION INDEX TEST



.F GEOTECHNICAL, INC ANAHEM HULS — CALABAS

# ANAHEIM TES

# SOR S. CHAR. S. LYBRUS SANTA ANA, CALIFORNIA METO! PHONE (714) 543-7367

TO: Stoney Miller

DATE: 6-28-89

P.O. No. Verbal

Shipper No.

Lab. No. A-4539-1-6

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|                          |                                |               |  |        |  |

JACK M. FRATT



MAYOR

McCulloch Realty, Inc. Kirkeby Center, Sta 1130 10889 Wilshire Blvd

Los Angeles Calif 90024 LOCATION: 16291 Sar Fernando Mission Blvd TRACT : PR 730

LOTS HAVING COMPACTED FILL: Parcel B

SUBJECT: PRIMARY STRUCTURAL FILL

Fill soil classification, per Table 28-A

Approval is granted for compacted fill constructed on the above lots described in the compaction report No. dated 3-25-81 described in the compaction report No. date prepared by Foundation Engineering Co., Inc. dated

Approval is limited to the area shown in the report and by the following requirements:

Compacted fill shall extend beyond the footings a minimum distance equal to the depth of fill below the footings.

Footing bearing pressure for all structures shall not exceed a value E. 1bs. per sq. ft. at surface. See reports; anches minimum, below approved compacted surface.

C.

Continuous footings per Code Section 91.3012 are required.

Dwelling foundations located partially or wholly upon compacted fill D.

ground shall meet the requirements of Section 91.3012.
Slope erosion control, planting, and irrigation of fill slopes, and runoff control are required as per Code Section 91.3007. E.

Building or structure footings shall be set back & feet from the face of slopes 20 feet or less in vertical height where the slope angle is between 14 horizontal to 1 vertical and 2 horizontal to 1 vertical. Where the vertical height of slope exceeds 20 feet and the slop angle is as described above, the set back shall be increased 1 foot for each additional 5 feet in vertical height over 20 feet to a maximum set back of 10 feet. For slopes exceeding 100 feet in vertical height the set back shall be 40 feet except as permitted in Code Section 91.3009(c).

Footings and concrete slabs on grade shall comply with the requirements G.

cutlined in the report.

H.. The soil engineer shall inspect the footing excavations to determine the they are founded in the recommended strata before calling the Department Chief of Grading Division for footing inspection. for footing inspection,

牙. R. Bauer Grading Engineer 485-3435

Tract: 22 327

Job Address:

16201 San Fernando Granada Hills, California NUIS DE RING GRADIN S R LO

Soil Testing Agency:

GRADINS FOUNDATION ENGINEERING CO.

18344 Oxnard Street

Tarzana, California

91356

Requested by:

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McCulloch Realty, Inc.
Kirkeby Center, Suite 1130
10889 Wilshire Blyd.

Los Angeles. California

Grading Plan by:

McClellan, Cruz, Gaylord

681-8461

1199 East Walnut Street Pasadena, California

91106

Grading Contractor:

Wirt P. Cunningham

349-5917

8500 Louise Avenue Northridge, California

91325

Date work started:

12/30/80

Date work completed:

2/25/81

Note: See attached report for description of the grading, classification of the soil and tabulation of the test results. A Soils Engineering Report describing the conditions at the site was prepared by Foundation Engineering Company on August 12, 1980; an Addendum Letter was also prepared by Foundation Engineering Company on January 20, 1981.

Date of Certificate:

March 25, 1981

I hereby certify that I have personally supervised the testing during placement and compaction of the fill described in this report, and on the basis of these tests it is my opinion that the work was done in compliance with the Los Angeles City Building Code, the regulations of the Department of Building and Safety, the Soil Engineer's Report, and in general conformity with the grading plan. This certification does not include location, elevation, grades, or dimensions of files.

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The above referenced site has been graded and compacted fill has been placed to provide building sites for a proposed commercial development.

The site is located at the northwest corner of the intersection of Ministry Avenue and San Fernando Mission Blvd. A shopping center complex co

No cesspools or seepage pits were discovered during the excavation process, however, several reinforced concrete piles were located. These were encountered across a major portion of the proposed building in the area where a theatre and market previously existed. The excavations resulting from the removal of the piles varied from about 6-1/2' to 13' in depth.

The Preliminary Soils Report intended that there would be minor grading with footings to be founded on natural ground. At the time of the discovery of the need for deeper fills an Addendum Letter was prepared. To minimize differential settlement between natural and compacted fill soils, an additional 5'± was removed from the remainder of the proposed building area. This was replaced as compacted fill.

An existing sewer line crosses the site beneath the northerly portion of the proposed structures. It is understood that this is to be re-routed around the new buildings. The old sewer trench was apparently backfilled with clean sand. The upper 5' of this backfill was removed and replaced as compacted fill. A manhole for this sewer line which the proposed building area was left in place at this time, however it is understood it will be removed when the sewer line is disconnected and the area will be overexcavated and backfilled with compacted fill. This fill should be tested as it is placed and should be the subject of a Supplemental Report.

Parcert on Company Fill 1620l San Frymanco Mission Blud. Granada Hills, California

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The depth of compacted fill varies depending on the depth of the old foundation systems encountered. In the area of the northern 'attached' buildings, the maximum depth of the fill is about 13'. In the area of the smaller structure at the southeast site corner, the maximum depth of fill is about 4'.

# Description of Fill

Prior to placement of the fill, the buildings east of the existing variety store were demolished and removed from the site. The deep concrete foundations that were located were over-excavated and removed from the site. The natural soils were removed as recommended in the Addendum Letter to provide a minimum of 3' of fill beneath all footings. The exposed ground surface was then scarified, moistened and compacted. The material used for the fill was obtained from the site and import sources and consisted of silty sands, clayey sands and sandy silts. These soils are considered to have a low potential for expansion.

The fill was placed in layers about 6 to 8 inches in thickness, moistened to near optimum moisture content, and compacted by track rolling.

Water was placed as necessary, on the completed portion of the fill before placement of additional fill. All fill was placed in this manner and the top of the fill was sloped to flow away from the pad to the surrounding parking lots. During placement of the deeper backfills, the sides of the excavations were broken down (benched) to provide a transition between the compacted fill and the adjoining ground.

The approximate extent of the grading is shown on the attached drawing, "Location of Density Tests". The drawing was prepared from a plan that was supplied to us.

1620) See Percendi Bission Blvd. Chorada Fills, California

# Testing

Field density tests were taken at frequent intervals near the fill surface. Representative samples of the soil were taken to the laboratory for compaction and classification tests. The relative density of the fill was determined from the compaction tests.

Where a density test was low, additional compaction was performed and the area was retested.

As some of the soils were imported, direct shear tests were conditive on samples remolded to at least 90 percent of maximum density to debugate the angle of internal friction and cohesion. Samples were saturated under normal load before testing and shear loads were applied quickly in accordance with the standard procedure for consolidated undrained shear test. The results of these tests are tabulated in the "Summary of Tests" at the rear of this report.

The locations of the density tests are given on the attached drawing showing the extent of the fill. The results of the tests are shown on the table "Summary of Tests", and a description of the test methods used is attached.

# Conclusions and Recommendations

The results of the field density tests indicate that the fill is compacted to at least 90 percent of the maximum density, determined in the laboratory in accordance with the requirements of the City of Los Angeles.

It is recommended that the provisions given in the Soils Engineering Report dated August 12, 1980 and the Addendum Letter dated January 20, 1981 be used as a basis for design.

Footings on compacted fill should be designed in accordance with the recommendations of the referenced reports.

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Structures within the influence of the deeper fills should be founded on at least 3° of compacted fill. Structures not influenced by the design fills may be designed in accordance with the preliminary Soil Engineering Report.

Continuous footings should be placed at a minimum depth of 12 inches below approved ground surface; 18 inches for isolated pads. The minimum width of continuous footings should be 12 inches; isolated pads 24 inches.

Continuous footings having a depth of 12 inches and a width of 12 inches, may be designed for a foundation pressure of 1500 pounds per aquare foot.

An increase of 700 pounds per square foot for each additional foot of and an increase of 350 pounds per square foot for each additional foot of width may be used, but should not exceed 3000 pounds per square foot.

Isolated footings having a depth of 18 inches and a least lateral dimension of 24 inches may be designed for a foundation pressure of 2100 pounds per square foot. An increase of 700 pounds per square foot for each additional foot of depth and an increase of 300 pounds per square foot for each additional foot of width may be used, but the foundation pressure should not exceed 3000 pounds per square foot.

Continuous footings should be reinforced with at least one no. 4 bar of steel near the top of the foundation wall and at least one no. 4 bar of steel near the bottom of the footing.

The recommendations for the structures influenced by the irregular depth of fills are intended for footings founded on at least 3' of compacted fill. The allowable foundation pressures given above may be used for footings on compacted fill provided this depth of compacted fill is below the footings. If the depth is less, all the footings should penetrate the compacted fill and should be designed as provided in the Pre-liminary Soils Report.

Control (Control (Con

The manhole that is located in the existing sever line in the northerly section of the "attached structures" is not included in the structural fill. This manhole must be removed and the area oversecovated and beliefilled with compacted fill. The new fill should be benched into the structure isting fill. All fills placed should be tested during placement and test results should indicate 90% relative compaction or better.

Some small berms have been placed along the westernmost portion of the larger building pad (adjacent to "Pic-N-Save"). It is understood that these area temporary and will be removed at a later date.

In the vicinity of the proposed "truck ramp", 4' to 5' of material fill remains to be overexcavated. It is assumed that these removals will be performed when the previously discussed sewer line manhole is removed.

The top of the floor slab should be at least six inches above finished grade and the ground surface should be sloped to drain away from the proposed structure.

Some of the fill soil used to complete the pad is slightly expensive and, as it has been compacted as required by the Code, the expension will be greater than if the soil were in a natural, uncompacted state. Therefore, that portion of the fill on which structures are to be placed should be thoroughly moistened to allow expansion to take place before the footings and slabs are constructed.

EKK

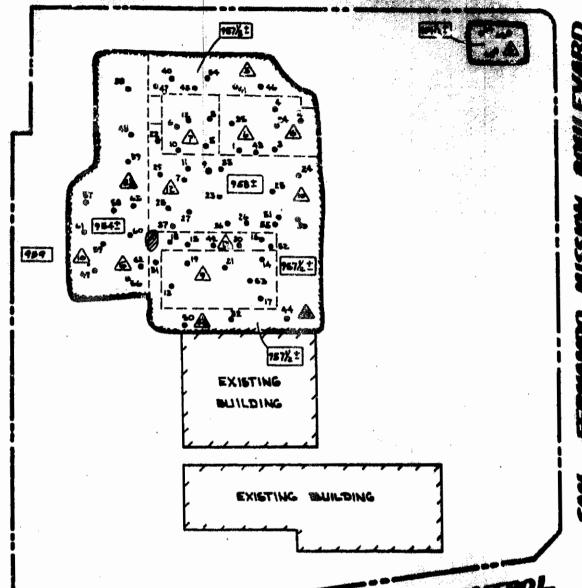
LOCATION OF DELLESS VESTE

WOODLEY

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AVENUE



BULL CREEK COUNTY FLOOD CONTROL

### LEGEND

LOCATION AND NUMBER OF DEHRITY TEST

DEPTH OF FILL

LIMIT OF FILL

THE ELEVATION

APPROX. AREA WHERE MANHOLE EXHIPS (YET TO BE GRADED)

HEOL SAN PEPHANDO MISSION SLYD.

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# FIELD DENSITY TESTS

|          |                    | 1838                 |                     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                         |
|----------|--------------------|----------------------|---------------------|---------------------------------------|-------------------------|
| Test No. | Date               | Field<br>Density.pcf | Percent<br>Moisture | Maximum<br>Density                    | Degree of<br>Compaction |
| :        |                    |                      |                     |                                       |                         |
| 1        | 12/30/80           | 122                  | 10                  | 124                                   | 98                      |
| 2        | 12/31/80           | 116                  | .8                  | 124                                   | 94                      |
| 3<br>4   | 1/5/81             | 115                  | 10                  | 124                                   | 98                      |
| 5        | 1/5/31             | 114                  | 16                  | 124                                   | 92                      |
| 3        | 1/6/81             | 119                  | 8                   | 124                                   | 98                      |
| 6        | 1/6/81             | 113                  | 8                   | 124                                   | 91                      |
| 7        | 1/6/81             | 112                  | 8<br>8<br>9<br>9    | 124                                   | 90                      |
| 8<br>9   | 1/7/81             | 117                  | 9                   | 124                                   | 91                      |
|          | 1/7/81             | 116                  |                     | 124                                   | 94                      |
| 10       | 1/7/81             | 116                  | 9                   | 124                                   | 94                      |
| 11       | 1/8/81             | 116                  | 9                   | 124                                   | 94                      |
| 12       | 1/9/81             | 113                  | 11                  | 124                                   | 91                      |
| 13       | 1/9/81             | 119                  | 13                  | 124                                   | 96                      |
| 14       | 1/9/81             | 118                  | 13                  | 124                                   | 95                      |
| 15       | 1/9/81             | 121                  | 9                   | 124                                   | 98                      |
| 16       | 1/9/81             | 118                  | 8                   | 124                                   | 95                      |
| 17       | 1/12/81            | 118                  | ğ                   | 124                                   | 95                      |
| 18       | 1/12/81            | 120                  | 12                  | 124                                   | 97                      |
| 19       | 1/12/81            | 114                  | 11                  | 124                                   | 92                      |
| 20       | 1/12/81            | 115                  | 10                  | 124                                   | 93                      |
| 21       | 1/13/81            | 125                  | 8                   | 127                                   | 98                      |
| 22       | 1/14/81            | 118                  | 9                   | 127                                   | 95                      |
| 23       | 1/14/81            | 119                  | 8                   | 127                                   | 94                      |
| 24       | 1/14/81            | 120                  | 12                  | 124                                   | 94                      |
| 25       | 1/15/81            | 122                  | īī                  | 127                                   | 96                      |
| 26       | 1/15/81            | 115                  | 10                  | 127                                   | 91                      |
| 27       | 1/16/81            | 119                  | 10                  | 127                                   | 94                      |
| 28       | 1/19/81            | 119                  | 10                  | 127                                   | 94                      |
| 29       | 1/19/81            | 118                  | 11                  | 127                                   | 93                      |
| 30       | 1/20/81            | 118                  | 10                  | 127                                   | 93                      |
| 31       | 1/20/81            | 117                  | 12                  | 127                                   | 0.9                     |
| 32       | 1/21/81            | 118                  | 12                  | 127<br>127                            | 92<br>93                |
| 33       | 1/21/31            | 119                  | 9                   | 127                                   | 94                      |
| 34       | 1/24/81            | 126                  | 9<br>9<br>3         | 127                                   | 99                      |
| 35       | 1/24/81            | 119                  | 12                  | 127                                   | 94                      |
| 36       | 1 /26 /01          | 100                  | 0                   |                                       | 0.5                     |
| 36<br>37 | 1/26/81            | 120<br>116           | 9                   | 127                                   | 94                      |
| 37<br>38 | 1/26/81            | 116                  | 10                  | 124                                   | 94                      |
| 39       | 1/26/81<br>1/26/81 | 120<br>118           | 10                  | 127                                   | 94                      |
| 40       | 2/2/81             | 126                  | 11<br>11            | 124                                   | 95                      |
| 70       | r/ c/ c1           | 150                  | 11                  | 127                                   | 99                      |

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16201 San Fernando Misston Blyd. Granada Hills, California

|   | Test No.   | Date    | Fiald<br>Density,pcf | Percent<br>Moisture | Maximum<br>Denaity | Degree of<br>Consistion |
|---|------------|---------|----------------------|---------------------|--------------------|-------------------------|
|   | 41         | 2/2/81  | 125                  | 11                  | 127                | <b>92</b> .             |
|   | 42         | 2/2/81  | 124                  | 10                  | 127                | 9                       |
|   | 43         | 2/2/81  | 122                  | 11                  | 127                |                         |
| • | 44         | 2/4/81  | 124                  | 12                  | 127                | 98                      |
|   | 45         | 2,'4/81 | 118                  | 10                  | 127                |                         |
|   | 46         | 2/4/81  | 118                  | 11                  | 124                | 95                      |
|   | 47         | 2/5/81  | 122                  | 11                  | 127                | 95                      |
|   | 48         | 2/5/81  | 113                  | 13                  | 124                | 91                      |
|   | 49         | 2/5/81  | 123                  | 12                  | 127                | <b>6</b> 7              |
|   | 50         | 2/5/81  | 120                  | 10                  | 127                | 94                      |
|   | 51*        | 2/6/81  | 106                  | 12                  | #55                | 85                      |
|   | 52         | 2/6/81  | 113                  | 12                  | 124                | 91                      |
|   | 54         | 2/6/81  | 110                  | 17                  | 114                | 96                      |
|   | 55         | 2/6/81  | 112                  | 14                  | 124                | 90                      |
|   | 56         | 2/11/81 | 116                  | 12                  | 124                | 94                      |
|   | 57         | 2/12/81 | 117                  | 11                  | 124                | 94                      |
|   | 58         | 2/13/81 | 122                  | 14                  | 125                |                         |
|   | 5 <b>9</b> | 2/13/81 | 122                  | 10                  |                    | 98                      |
|   | 60         | 2/13/81 | 112                  |                     | 127                | 96                      |
|   | 00         | 2/13/61 | 112                  | 16                  | 114                | 98:                     |
|   | 61         | 2/17/81 | 110                  | 16                  | 114                | 96                      |
|   | 62         | 2/17/81 | 114                  | 16                  | 125                | <b>9</b> 1              |
|   | 63         | 2/17/81 | 113                  | ī                   | 125                | 90                      |
|   | 64         | 2/24/81 | 115                  | <b>*</b> 8          | 124                | 93                      |
|   | 65         | 2/24/81 | 118                  | 12                  | 127                | 93                      |
|   | 66         | 2/25/81 | 125                  | 12                  | 127                | 99                      |
|   |            | -//     | 1-4                  | 14                  | 14/                | 77                      |

\*Test failed. Additional compaction was performed and the area was retested. See Maximum Density column for number of satisfactory retest.

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16201 San Fernando Mission Blvd. Granada Hills, California

| COMP                       | ACTION TEST | <u>s</u> |     |               |
|----------------------------|-------------|----------|-----|---------------|
|                            | I.          | II       | 111 | Import Import |
| Maximum dry density, pcf:  | 124         | 124      | 127 | 124 114       |
| Maximum size tested:       | #4          | #4       | **  |               |
| Optimum moisture, percent: | 8           | 10       | 10  | 10 14         |

# CLASSIFICATION TESTS

| Soil type:  | Silty                  | Sandy                 | S11ty                  | Clayey Clayey              |
|---|------------------------|-----------------------|------------------------|----------------------------|
|   | sand                   | silt                  | sand                   | sand sand                  |
| <pre>% passing 3/4" sieve: % passing no. 4 sieve: % passing no. 200 sieve: % passing no. 270 sieve:</pre> | 100<br>100<br>47<br>38 | 100<br>99<br>55<br>45 | 100<br>100<br>39<br>30 | 99 98<br>98 98<br>44 38 38 |
| Plasticity:   | Non                    | Slightly              | Non                    | Slightly Slightly          |
|   | pl <b>as</b> t         | ic plastic            | plast                  | ic plastic plastic         |

# EXPANSION TESTS

|                                      |              | _           |     |     |     |
|--------------------------------------|--------------|-------------|-----|-----|-----|
| Surcharge Load, p.s.f.               | 144          | 144         | 144 | 144 | 144 |
| Expansion Index:                     | 20           | 0           | 0   | 18  | 38  |
| DIRE                                 | ECT SHEAR TI | 3T <b>S</b> |     | :   |     |
| Angle of Internal Friction (degrees) | -            | <b>-</b> .  | -   | 30  | 31  |
| Cohesion (psf)                       | -            | -           |     | 100 | 120 |

# TEST METHODS

# FIELD DENSITY TESTS

Field density tests were made by the sand volume method in accordance with the American Society for Testing Materials (ASTM) Test Method D 1556. The density was determined by obtaining the dry weight of the soil from a hole approximately eight inches deep and determining the volume of the hole with calibrated sand.

# COMPACTION TEST

The maximum density and optimum moisture content were determined in the laboratory in accordance with the American Society for Testing Materials (ASTM) Test Method D 1557. The compaction test was made in a four-inch diameter mold having a 1/30 cubic foot volume, with 25 blows of a tenpound hammer falling 18 inches on each of five layers. A new batch of soil was used for each point on the compaction curve.

## CLASSIFICATION TESTS

Classification tests were made in accordance with American Society for testing materials (ASTM) Test Method 2488. The No. 4 sieve has 3/16 inch openings. The largest particle that will pass a No. 200 sieve is about the smallest that can be seen with the unaided eye. Gravel is that free-tion larger than the No. 4 sieve; sand is the fraction that passes a No. 4 sieve and is retained on a No. 200 sieve. The fraction passing the No. 200 sieve is a silt if non-plastic and a clay if plastic.

# EXPANSION TEST

The expansion index test is in accordance with the Uniform Building Code Standard No. 29-2. A moistened sample was compacted in a four inch diameter ring with 15 blows of a 5.5 pound hammer having a fall of 12 inches per inch of compacted sample. If the degree of saturation ranged between 49 and 51 percent for an assumed specific gravity of 2.7, the specimen was loaded with 144 pounds per square foot and flooded. After 24 hours the expansion was noted and the expansion indices calculated.

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## BUILDING AND SAFETY COMMISSIONERS

WILLIAM J. ROUSE
PRESIDENT

EFREN ABRATIQUE, P.E.
VICE-PRESIDENT

MARSHA L. BROWN
ILAN ISRAELY
IAVIER NIJĀE?

# CITY OF LOS ANGELES



DEPARTMENT OF BUILDING AND SAFETY 201 NORTH PIGUEROA STREET LOS ANGÉLÉS, CA 90012

ANDREW A. ADELMAN, P.E.

RAYMOND CHAN EXECUTIVE OFFICER

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# SOIL REPORT APPROVAL LETTER

March 17, 2005

LOG # 46870-01 SOILS FILE - 2

Geld Enterprises P.O. Box 8370 Van Nuys, CA 91409

TRACT:

21327

LOT:

FR 1 (ARB 2)

LOCATION:

16231 San Fernando Mission Blvd.

| REPORT/LETTER(S)  | NO.                      | DOCUMENT                 | PREPARED BY  |
|---|--------------------------|--------------------------|--|
| Soil Report<br>Soil Report                                  | NT-2532-01<br>NT-2532-01 | 02/25/2005<br>03/10/2004 | Geotechnical Solutions, Inc.<br>Geotechnical Solutions, Inc. |
| PREVIOUS REFERENCE REPORT/LETTER(S) Dept. Correction Letter | REPORT<br>NO             | DATE(S) OF<br>DOCUMENT   | PREPARED BY  |

The current referenced reports responding to the Department Correction Letter dated 03/03/2005 have been reviewed by the Grading Division of the Department of Building and Safety.

The referenced reports provide recommendations for the proposed Nextel Telecommunication Facility Gothic (CA-8103-B). According to the report dated 03/10/2004, the project will consist of construction of 62-foot high monopole antenna and an equipment shelter within the existing shopping center. The equipment shelter is not for human occupancy.

The site soils consist of natural sand and elay. The antenna will be supported on end bearing pier/friction pile, and the equipment shelter will be supported on conventional footings.

The site is not located within the liquefaction zone as shown on the "Seismic Hazard Zones" map issued by the State of California, and liquefaction study is not required. This satisfies the requirement of the State of California Public Resources Code, Section 2690 et seq. (Seismic Hazard Mapping Act).

The reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis () refer to applicable sections of the 2002 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

LADBS G-5 (Rev. 9/04)

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

Page 2 16231 San Fernando Mission Blvd.

- The soils engineer shall review and approve the detailed plans prior to issuance of any permit.
   This approval shall be by signature on the plans which clearly indicates that the soils engineer has reviewed the plans prepared by the design engineer and that the plans included the recommendations contained in his report.
- All recommendations of the report which are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.
- A copy of the subject and appropriate referenced report and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above report to the Building Department Plan Checker prior to issuance of the permit. (7006.1)
- 4. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code.(7011.3) In-place density tests shall be performed in accordance with the latest version of A.S.T.M. Standard. Density tests utilizing nuclear devices shall conform to Information Bulletin P/BC2001-28 previously MGD#61.
- Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (7011.3 & 1806.1)
- The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1)
- The antenna may be supported on end bearing pier or friction pile deriving entire support from the
  natural soils. Note: end bearing and side friction combined is not acceptable to the Department.
  Equipment shelter may be supported on conventional, spread foundation supported by natural
  soils, as recommended.
- 8. Existing uncertified fill shall not be used for lateral support of deep foundation. (7011.3)
- 9. Slabs placed on approved compacted fill shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way.
- 10. The LABC Soil Type underlying the site is S<sub>d</sub>. (1636A)
- 11. All roof and pad drainage shall be conducted to the street in an acceptable manner. (7013.10)
- Soil engineer shall inspect the excavations for the footings to determine that they are founded in the recommended strata before calling the Grading Division of the Department for footing inspection. (Code Section 91,7008)
- Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He shall post a notice on the job site for the LADBS Building

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Page 3 16231 San Fernando Mission Blvd.

Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and

- approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)
- Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of shoring, protection fences and dust and traffic control will be scheduled.
- 16. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. He shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the LADBS Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Engineering Section of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the permit shall be included. (7011.3)

 If compacted fill is to support the slab-on-grade, no slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.

ANIFRZEJ T. SZPIKOWSKI Georechnical Engineer II

ATS/ats 46870-01 (213) 482-0480

cc: Geotechnical Solutions, Inc.
Applicant
LADistrict Office

City of Los Angeles DEPARTMENT OF BUILDING AND SAFETY ADDRESS APPROVED **Grading Division** Signature/Date APPLICATION FOR REVIEW OF TECHNICAL REPORTS AND IMPORT-EXPORT ROUTES INSTRUCTIONS A. Address all communications to the Grading Division, Department of Building and Safety, 201 N. Figueroa St., 3rd Fl., Los Angeles, California 90012-4869. Phone (Area Code 213) 977-6329. B. Obtain address approval from the Department of Public Works prior to submittal. C. Submit 2 copies (4 for fault study zone) of reports and 3 copies of application with items (1) through (10) completed. D. Check should be made to the Department of Building and Safety. Note: Please Print (2) PROJECT VOZZA W. Son Ferrando 1 LEGAL DESCRIPTION 21227 ADDRESS No (4) APPLICANT -B18.402.7286 Phone (Daytime) (5):Report(s) (6) Report Prepared by Control Date(s) Status of project: Proposed ☐ Under Construction ☐ Storm Damage Previous site reports? \_\_ If yes, give date(s) of report(s) and name of company(s) who prepared report(s). (9) Previous Department actions? \_\_\_\_\_\_ If yes, please give dates and attach a copy to expedite processing. Dates 000 Signature of applicant (DEPARTMENT USE ONLY) b BEVIEW REQUESTED & PROCESSING FEES REVIEW REQUESTED & PROCESSING FEES ☐ Foundation investigation Seismology report per 91.2305(d) Soils Engineering 🧀 🕏 Environmental Assessment Geology Import-Export Route Combined Soils Engr. & G Division of land ☐ Supplemental Sub-total □ Combined Supplement One-Stop Surcharge THE REPORT IS APPROVED WITH CONDITIONS IN NOT APPROVED. TOTAL FEE 04.20 DEPARTMENT ACTION BY: For Soils & Foundation For Geology Date Date ☐ Conditions of Approval ☐ Reasons for Non-Approval ☐ See Attached letter ☐ Supplemental Sheet Attached LA Department of Building and Safety 180:00 ONE STOP SURCH \$3,60 CITY PLANNING SURCH \$10.80 \$5.40 MISCELLANEOUS \$5,00 Tota Casher Use Only) \$204.20 (Continued Over)

DISTRIBUTION

☐ Owner

□ Applicant

Soil Engineer

☐ Geologist

☐ Board files
☐ Tract file

LA Plan Check

□ VN

□ WLA

□ SP/WLA

Inspection

☐ BMI

□ VN

□ WLA □ BI

☐ SP/WLA



10109202006

# Geotechnical Solutions, Inc.

Geotechnical, Structural & Environmental Engineering

February 25, 2005

Tetra Tech Communications 310 Commerce Irvine, California 92602

Attention: Ms. Kim Ice

RE: Gothic (CA-8103-B) 16231 San Fernando Mission Boulevard Granada Hills, California Log # 46870

#### Gentlemen:

This letter is in response to a telephone conversation with the City of Los Angeles, Building & Safety Grading Section and will serve as an addendum for our geotechnical report dated March 10, 2004 as follows:

"The above mentioned project site does not lie within the seismic zone of liquefaction hazard area, hence there is no need for detailed liquefaction study".

Respectfully submitted,

Geotechnical Solutions, Inc.

Abraham S. Baha, P.E. Principal

Cc: (2) City of Los Angeles



Phone: (949) 453-0406 2

27 Mauchly, Suite 210, Irvine, CA 92618

Fax: (949) 453-0409

NEXTEL COMMUNICATION TELECOMMUNICATION FACILITY GOTHIC (CA-8103-B)

ΑT

16231 SAN FERNANDO MISSION BOULEVARD GRANADA HILLS, CALIFORNIA

FOR

NEXTEL COMMUNICATIONS 310 COMMERCE IRVINE, CALIFORNIA 92602

PROJECT NO: NT-2532-01

MARCH 10, 2004

GEOTECHNICAL SOLUTIONS, INC. GEOTECHNICAL & ENVIRONMENTAL ENGINEERING



# Geotechnical Solutions, Inc.

Geotechnical, Structural & Environmental Engineering

March 10, 2004

Nextel Communications 310 Commerce Irvine, California 92602

Attention: Mrs. Amy Sinon

RE: Gothic (CA-8103-B)
16231 San Fernando Mission Boulevard
Granada Hills, California

Conflomen:

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Submitted herewith is the report of the Geotechnical Engineering study conducted by this office at the proposed Nextel Communication cellular transmission center. The project site is within existing Otis Gordon Sports Park located at San Fernando Avenue, in the City of Granada Hills, California.

Based on the investigation findings, it is concluded that development of the project is feasible from a geotechnical point of view. Proposed equipment shelter may be supported by conventional continuous footings bearing on existing subgrade soils and moderately deep cast-in-place piers will be the most suitable foundation system for the proposed 62-foot high monopalm.

The closest known active fault capable of producing a major earthquake is Sierra Madre (San Fernando) Fault, which is located about 2.0 miles (3.3 km) away from the site.

The site does not lie within or near an Alquist-Priolo Earthquake Fault Zone as designated by the California Geological Survey, potential for direct surface fault rupture at the site is considered unlikely.

Phone: (949) 453-0406

27 Mauchly, Suite 210, Irvine, CA 92618

Fax: (949) 453-040

The investigation was made in accordance with generally accepted geotechnical engineering principles and procedures and included such field and laboratory tests considered necessary under the circumstances. In the opinion of the undersigned, the accompanying report has been substantiated by mathematical and other data and presents fairly the design information requested by your organization.

Respectfully submitted,

Geotechnical Solutions, Inc.

+ Clarya

Dharma Shakya, Ph.D., P.E. Sr. Project Engineer



Abraham S. Baha, P.E. Principal

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Distribution: (3) Nextel Communications

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Project No NT-2532-01 Gothic (CA-8103-B)

#### Introduction

The primary objectives of this study were to explore subsurface conditions beneath the project site and evaluate the existing earth materials relative to foundation support and lateral pressure design factors.

In general, the study objectives were met by a visual reconnaissance of the site and vicinity, review of available tentative development plans, exploratory drilling, seismic evaluations, and engineering analysis. The general scope and objectives of the study were established in collaboration with the client.

#### Proposed Construction

The project will consist of construction of a 62-foot high monopalm and an equipment shelter inside an existing shopping center at the subject leased area. The cellular facility will be in an area will be at the asphalt concrete parking area. The design vertical load of the monopalm will not exceed 60 kips, and horizontal shear force will vary in relation to the height of the pole and transient loads.

#### Site Description

The proposed project site lies on a relatively flat ground and access to the site is via Woodley Avenue through an asphalt concrete driveway. The site is within a developed facility north of San Fernando Avenue and west of Woodley Avenue in the Granada Hills, County of Los Angeles, California. Subject leased area is located at the northeast portion of the property as shown on Plate B.

#### Seismic Conditions

The site does not lie within or near an Alquist Priolo Earthquake Fault Zone as designated by the California Geological Survey; therefore potential for direct surface fault rupture is considered unlikely.

Project No NT-2532-01 Gothic (CA-8103-B)

UBCSEIS version 1.03 a computer program show that Sierra Madre (San Fernando) Fault to be closest to the site. The tabular data for UBCSEIS indicates that the Sierra Madre (San Fernando) Fault to be 2.0 miles (3.3 km). The Sierra Madre (San Fernando) Fault has been assigned a maximum earthquake magnitude of 6.7, is a Type B fault, and has a slip rate of 2.0 mm per year. The site lies in Seismic Zone 4 (1997 UBC).

Probabilistic risk analyses were performed using the computer program FRISKSP, 2000 Edition, by Blake. The fault database was provided from the California Geological Survey (CGS). FRISKSP models earthquake sources as three dimensional planes and computes site specific probabilities of exceedance of given acceleration levels or pseudorelative velocity levels for each earthquake source. The cumulative effects from all modeled earthquake sources are tabulated and graphically plotted. The program offers a choice of attenuation relationships by various researchers to evaluate the attenuation of earthquake energy with source distance. For this study the attenuation relationship developed by Campbell & Bozorgnia (1997) was used for the underlying alluvial soil type. The calculated peak ground acceleration using the attenuation relationship for a ten percent chance of exceedance in 50-years or a return period of 475-years was 0.74g.

#### Exploration

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The field investigation consisted of subsurface exploration by means of one test boring to a maximum depth of 36.5 feet; made with an eight-inch hollowstem drill rig and encountered refusal below due to the boulders. Approximate boring location is shown on Plate B. A continuous record of the soils encountered during exploratory drilling was made by the field engineer and is presented on plate D.

It should be noted that lines designating interfaces between soil strata on the boring log represent approximate boundaries since the actual transition between materials is somewhat gradual. Undisturbed samples were secured at frequent depth intervals for laboratory examination and testing. Disturbed bulk samples representative of the surficial subgrade materials were also obtained.

The relative sampler penetration resistance exhibited by the deposit's sample is tabulated in the Blow per Foot column of the pertinent boring logs. Recorded blow counts for 12 inches of sampler penetration was medium to high. Ground water was not encountered at the full depth of exploration and caving did not occur during this exploratory drilling operation.

#### Soils Condition

Significant fill was not encountered at the boring location during the exploratory drilling. The underlying natural soil is generally, fine silty, slightly clayey sands with layers of gravel in the upper zone. A more detailed soil profile is shown on Plate C Log of Test Hole.

#### Laboratory Testing

Laboratory testing was programmed following a review of field investigation data and after considering the various foundations, floor slabs, and grading elements to be evaluated. In general, this includes physical testing to establish foundation-bearing characteristics, and classification tests.

#### A. Moisture and Density

In situ moisture content and density were determined for all the undisturbed core samples obtained during test boring drilling operations. Test results are tabulated on Plate C Log of Test Hole.

#### B. Mechanical Analysis

The texture composition of a selected typical sample determined by the hydrometer test method was as follows:

| Boring | Depth  | Percent | Percent | Percent |
|--------|--------|---------|---------|---------|
| No     | (Feet) | Sand    | Silt    | Clay    |
| 1      | I-2    | 63      | 22      | 15      |

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#### C. Direct Shear

Direct shear tests were performed on undisturbed natural samples of soil encountered within the full depth explored, and were considered most pertinent in the design of shallow spread footings, and moderately deep pier. Tests were performed in the saturated-drained moisture. Individual test results are shown on Plate D.

#### D. Expansion

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Expansion characteristics were determined by the Expansion Index test of a typical bulk sample considered to be generally representative of the near subgrade soils. Test results are as follows:

| Boring<br>No. | Moisture<br>(%) | Dry Density<br>(pcf) | Expansion Index |
|---------------|-----------------|----------------------|-----------------|
|               |                 |                      | •               |
| 1             | 10.9            | 107.4                | 18              |

According to the unified Building Code, Table 18-1-B, the upper soil is classified as low expansive.

#### E. Consolidation

Consolidation (load deformation) test was performed on undisturbed samples at selected depths. Plotted test results are presented on Plates E through G.

#### F. Chemical Analysis

Chemical sulfate analysis was performed on a representative sample by the CAL 417-A method. A soluble sulfate of 155 parts per million was indicated, therefore, type II Portland cement should be used for the foundation elements in contact with the soil.

#### Design Values

Representative values were selected from the test data and other sources for design and is tabulated below:

Expansion Index

18

Angle of Internal Friction

25-31 deg

Cohesion

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537248

150-250 psf

Subgrade Reaction (K)

100 pci

#### Earthquake Induced Liquefaction Potential

Earthquake-induced vibrations can be the cause of several significant phenomena, including liquefaction in fine silt and sands. Liquefaction results in a complete loss of strength and can cause structures to settle or even overturn, if it occurs in the bearing zone. If liquefaction occurs beneath sloping ground, a phenomenon known as Lateral Spreading can occur. Liquefaction is typically limited to the upper fifty (50) feet of the subsurface of the soils.

Four items are generally considered to have the most significance in liquefaction:

- Poorly graded fine and silty sands are the types of soils most susceptible to liquefaction. Soils that contain a wide range of soil particle sizes and coarse soils that drain freely are not generally susceptible to liquefaction.
- The water table perched or otherwise usually must be within the upper fifty (50) feet of soils, for liquefaction to occur. Soils above the water table do not liquefy.
- 3. Liquefaction has been shown to be unlikely where the relative density of the soils is greater than 70%. A soil that has relative density of less than 70% may liquefy depending on a number of factors. The two most important of which are the strength and duration of the seismic shaking and the percentage of the soil particles that are silt and clay sized.

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 If the clay content (determined by the percent finer than 0.005 mm) is greater than (15%) percent, the soil is usually considered non-liquefiable, unless it is extremely sensitive.

The site will be susceptible to liquefaction, if all four items discussed above meet the criteria. An examination of the existing conditions at the site, in relation to the criteria listed above, indicates the following:

- Determination of soil gradation shows that the underlying soil particle sizes are very fine to fine silty, clayey sands.
- 2. Groundwater was not encountered at the full depth of exploration.
- Standard Penetration Tests (SPT) indicates that the soil within the depth range studies is in a medium to high state, with a relative density of over 70 percent.
- 4. The soil contains about 15% of clay constituent.

Based upon the evaluation of above criteria and our preliminary screening, it is our opinion that a potential for earthquake induced liquefaction is low at the subject site, and earthquake induced liquefaction potential will not be considered a constraint for this development which will not be used as a human occupancy structure.

#### Conclusions and Recommendations

It is concluded that the site will be suitable for the proposed construction described in this report, provided that the design and construction are properly executed. Our recommendations are based on site conditions encountered during the exploration, laboratory tests, and experience with similar sites, and are in accordance with generally accepted procedures of geotechnical engineering.

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#### Foundation Support

Support of the proposed monopalm by a moderately deep caisson and the equipment building by continuous footings are the most suitable and economical foundation system and are recommended.

#### Equipment Building

The equipment shelter and enclosure walls may be supported by an 18-inch deep continuous footing. The footings should be extended at least 12 inches into natural material. An 18-inch deep and 12-inch wide continuous footing resting on natural subgrade or newly compacted fill soil may be designed for an allowable bearing value of 1,500 pounds per square foot. The estimated settlement will be less than one-half of an inch.

Recommended bearing values are for dead plus live loads and may be increased one-third for combined dead, live, and seismic forces.

All continuous footings should be incorporated with minimum 2#4 bar at the top and 2#4 bar at the bottom or as specified by the Structural Engineer.

#### Pier Foundation

It is understood that a 62-foot high monopalm will be constructed at the site. A cast-inplace reinforced concrete pier may be used for support of the proposed monopalm.

The lateral forces will be the controlling element in this case depending on the height of the structure and wind load. Therefore, it is recommended that the minimum pier diameter should be 48 inches and should be extended to a minimum depth of 15 feet into natural soil.

The pier may be designed for an allowable end bearing of 3,000 pounds per square foot or for an average frictional resistance of 100 pounds per square foot. Either skin resistance or end bearing will provide adequate foundation support for the pier.

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It is recommended that concrete be placed immediately after drilling. The concrete for the pier should be placed through tremmic or other directional devices. Pier drilling operations should be subject to observation by this office to confirm the conditions encountered are consistent with the conclusions and recommendations of this report and/or to make any appropriate modifications, if necessary.

#### Lateral Passive Pressure

Horizontal forces may be resisted by the combined effect of friction resistance of 0.40 times the dead load and a passive pressure of 300 pounds per square foot per foot of depth. The weight of the pile may be neglected. If combining friction and passive resistance, the friction component shall be reduced by 1/3.

The allowable bearing capacity and the allowable resistance of horizontal forces may be increased 1/3 for earthquakes and other transient forces.

#### Floor Slab

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Based on test results, the underlying surface soils are very low expansive, therefore, special measures will not be required for expansion mitigation. The slab should be incorporated with minimum reinforcement of #3 bars 18 inches center to center each way or as specified by the Structural Engineer. The slab thickness should be 4 inches minimum and should be placed over approved subgrade soils.

#### Seismic Factors

- a. Soil Profile Type = Type  $S_D$
- b. Seismic Zone = 4
- c. Seismic zone Factor = 0.4
- d. Fault Distance = 2.0 miles (3.3 km)
- d. Seismic Source Type = Type B

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e. Seismic Coefficient

 $C_n = 0.44 N_{22}$ 

 $C_{v} = 0.64 N_{v}$ 

f. Near Source Factor

N = 1.2

 $N_{y} = 1.4$ 

g. Earthquake Magnitude

= 6.7

h. Maximum Slip Rate

= 2.0 mm / year.

i. Probabilistic ground acceleration

= 0.74g

#### Field Resistivity

Resistivity tests were performed at the field using NILSSON Model 400 Soil Resistance Meter by driving 4 test rods 12 inches deep into the ground in a straight line with a uniform distance of 5 and 10 feet in the same line. Test results and the field engineer's report are enclosed in Appendix C.

#### Corrosivity

A major factor in determining soil corrosivity is electrical resistivity. The electrical resistivity of a soil is a measure of its resistance to the flow of electrical current. Corrosion of buried metal is an electrochemical process in which the amount of metal loss due to corrosion is directly proportional to the flow of electrical current (DC) from the metal into the soil. Corrosion currents, following Ohm's Law, are inversely proportional to soil resistivity. Lower electrical resistivities result from higher moisture and chemical contents and indicate corrosive soil. Other soil characteristics that can influence corrosivity toward metals are pH, chemical content, soil types and site drainage

Based on the test results the soils are classified as mildly corrosive to ferrous metals and non-corrosive to Portland cement concrete. Therefore it is recommended to use Type II Portland cement for all concrete elements in contact with soil. Ferrous metals and pipes should be properly coated and wrapped.

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#### Grading Procedures

No major grading will be required at this site, other than footing excavation, pier drilling and utility trench backfill. The following are the general grading procedures.

- a. The site for proposed development should be cleared of existing asphalt concrete and any unsuitable material to be hauled off site.
- b. The equipment shelter area should be scarified and compacted at the surface subject to observation and approval by soil engineer.
- c. On-site materials are acceptable for backfill if moisture conditioned and rocks over 3 inches are removed. The moisture content of the soil at the surface may be higher than optimum moisture, and may require aerating. If required, import fill should consist of clean, granular, non-expansive soils free from vegetation, debris or rocks larger than three inches in size. The Expansion Index value should not exceed a maximum of 20.
- d. All recompacted native and import soil should be spread, watered or aerated, mixed and compacted by mechanical means of approximately six-inch thick lifts. The minimum degree of compaction obtained should be at least 90 percent of the ASTM D-1557-00 Laboratory test standard.
- e. Backfill placed in narrow, restricted areas such as along utility trenches, may be placed in 12 to 18 inch thick lifts, provided; the minimum required degree of compaction is obtained.
- f. Observation and testing of all compaction should be under the direction of the Geotechnical Engineer. The Engineer should be notified at least two days in advance of the start of the grading.

#### Recommendations for Construction

Surveying. The contractor shall set necessary stakes to verify lines and grades as shown on the plan. The owner or his representative shall monitor the work to verify that the depth of footing embedment is correct.

Pier Drilling. Drilling operation of the pier and footing excavations should be observed by a representative of Geotechnical Solutions, Inc.

#### Limitations

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This report is issued with the understanding that it is the responsibility of the owner or his representative to see that the information and recommendations contained herein are called to the attention of the other members of the design team for the project and that the applicable information is incorporated into the plans, and that the necessary steps are taken to see that the contractors and the subcontractors carry out such recommendations. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or due to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes outside of our control. The validity of the recommendations of this report assumes that Geotechnical Solutions, Inc. will be retained to provide these services.

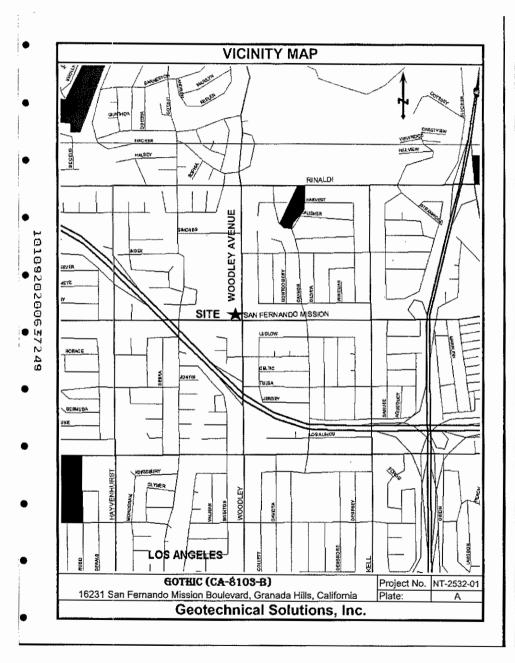
#### Geotechnical Solutions, Inc.

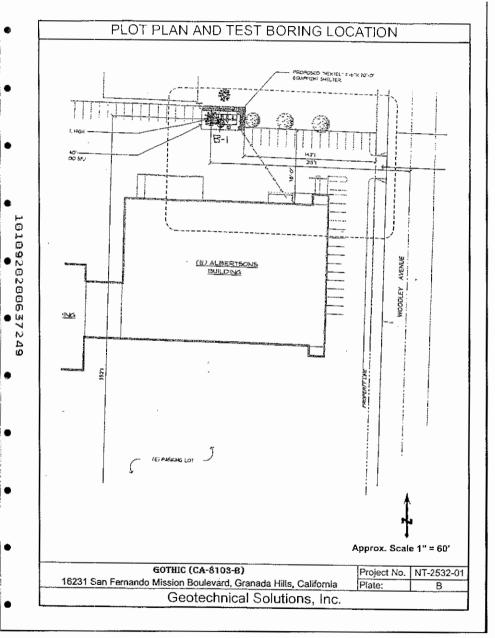
Project No NT-2532-01 Gothic (CA-8103-B)

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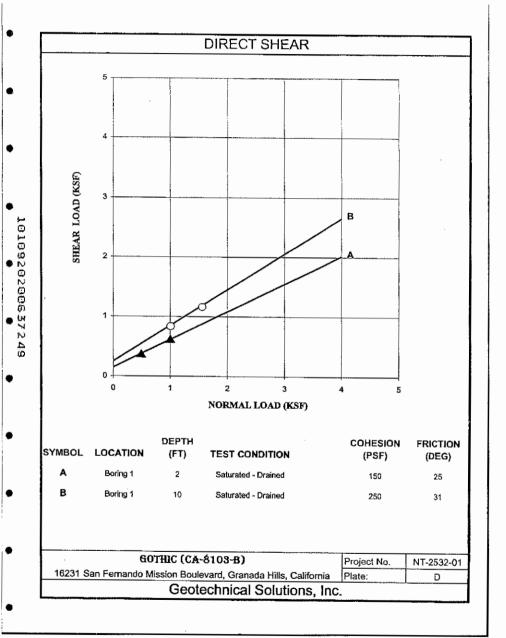
# Appendix A

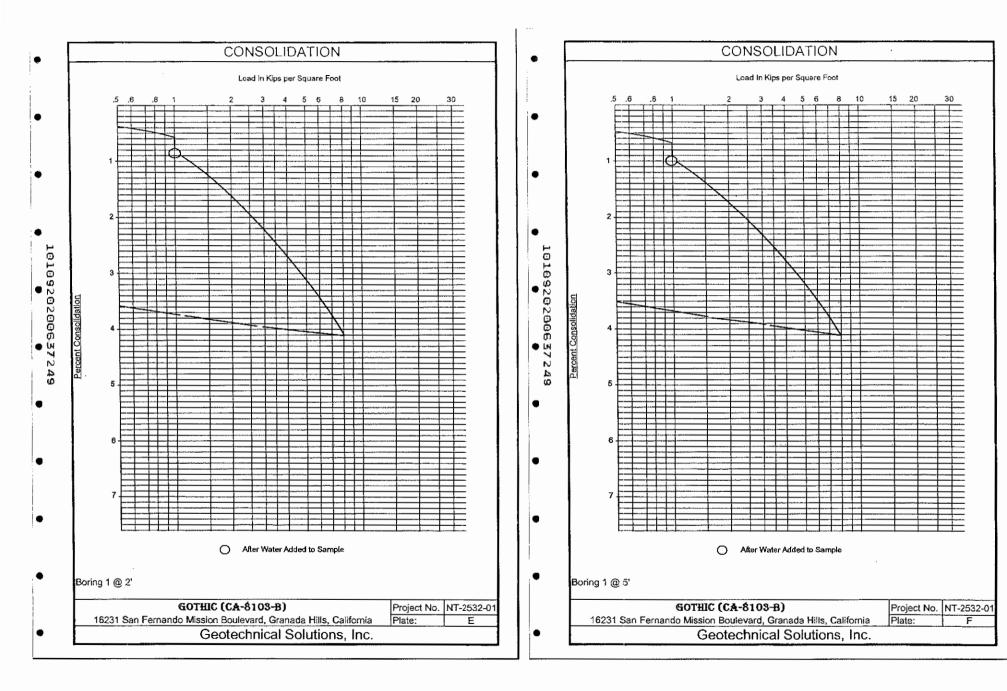
- Vicinity Map
- Plot Plan & Test Boring
- Log of Test Hole
- Direct Shear Test.
- Consolidation Tests
- Laboratory Testing

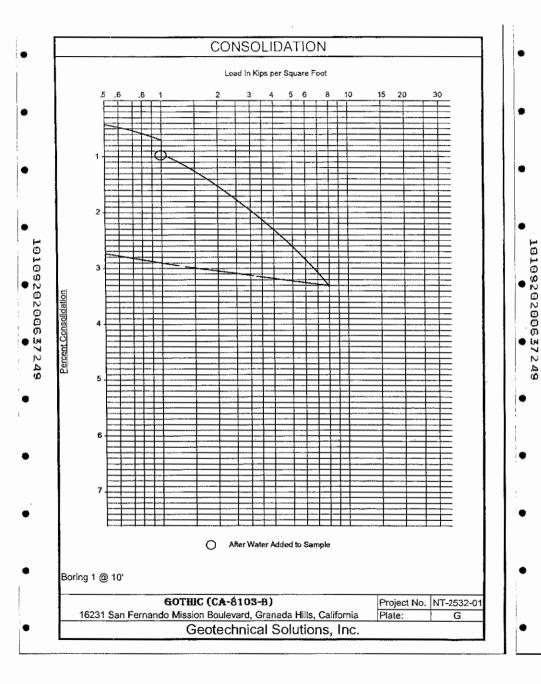




| • | •                |                | Log of Te  | est H                     | ole I | No.  | 1      |       |                |                   |
|---|------------------|----------------|--|---------------------------|-------|------|--------|-------|----------------|-------------------|
|   |                  |                | Equipment: 8" Hollowstem Auger   |                           |       | Dr   | illing | Date: | 3/4/2004       |                   |
|   |                  | Depth (ft) S   | g Weight: 140 lbs. @ 30" Drop  B Description                                     | TN                        | l D   | W    | 1 #1   | #200  |                | F                 |
|   |                  |                | Asphalt  | <u>  ``</u>               | -     |      | 77     | #200  |                | F                 |
|   | •                | 2 -            | Alluvium SILTY SAND, moist, fine grained   | 24                        | 108   | 10   |        |       | brown          | medium<br>dense   |
| • | •                | 5 —            | Same   | 19                        | 107   | 15   |        |       | light<br>brown | loose             |
|   | •                | 10 —           | Same   | 46                        | 119   | 9    |        |       |                | medium<br>dense   |
|   | 1010920200637249 | 15 — <b>**</b> | SILTY CLAY w/spme sand, very<br>moist, fine grained, low to medium<br>plasticity | 28                        | 105   | 25   |        |       | light<br>brown | stiff             |
|   | 02006            | 20*            | SAND w/gravel, moist, coarse grained   | 58                        | -     | 10   |        |       | brown          | very<br>dense     |
|   | 37249            | 25*            | some pebbles   | 100                       | -     | 7    |        |       |                |                   |
| • | •                | 30 *           | SANDY CLAY w/gravel, moist low plasticity  | 31                        | -     | 18   |        |       |                | hard              |
| • | •                | 35 —           | SILTY SAND w/gravel, some clay   | 34                        | -     | 13   |        |       |                | dense             |
|   |                  | 40             | End of boring @ 36.5-ft.<br>No Groundwater.<br>No caving                         |                           |       |      |        |       |                |                   |
|   | 1                | Legend:        | SPT  |                           |       |      |        |       |                |                   |
| • | •                | N<br>D         |  | Sampl<br>assing<br>assing | Sieve |      |        |       |                | Color<br>Firmness |
| 1 |                  |                | GOTHIC (CA-8103-   |                           |       |      |        |       | Project No.    | NT-2532-01        |
|   |                  | 16231          | San Fernando Mission Boulevard, G  |                           |       |      |        |       | Plate:         | C                 |
| • |                  | L              | Geotechnica  | al So                     | lutio | ons, | Inc    |       |                |                   |





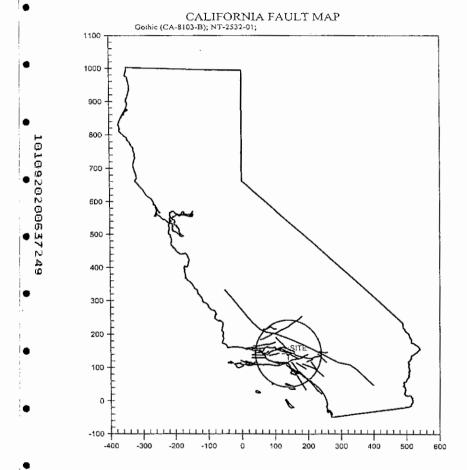


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Appendix B

- Seismic Data
- UBCSEIS
- Frisksp



UBCSEIS COMPUTATION OF 1997 UNIFORM BUILDING CODE

SEISMIC DESIGN PARAMETERS

JOB NUMBER: NT-2532-01

DATE: 03-05-2004

JOB NAME: Gothic (CA-8103-B)

FAULT-DATA-FILE NAME: CDMGUBCR.DAT

SITE COORDINATES:

SITE LATITUDE: 34.2736 SITE LONGITUDE: 118.4856

UBC SEISMIC ZONE: 0.4

UBC SOIL PROFILE TYPE: SD

NEAREST TYPE A FAULT:

NAME: SAN ANDREAS - 1857 Rupture

DISTANCE: 42.4 km

NEAREST TYPE B FAULT:

NAME: SIERRA MADRE (San Fernando)

DISTANCE: 3.3 km

SELECTED UBC SEISMIC COEFFICIENTS:

Na: 1.2

Nv: 1.4

Ca: 0.51 Cv: 0.91

Ts: 0.707

To: 0.141

\*\*\*\*\*\* \* CAUTION: The digitized data points used to model faults are limited in number and have been digitized from small- \* scale maps (e.g., 1:750,000 scale). Consequently, the estimated fault-site-distances may be in error by several kilometers. Therefore, it is important that the distances be carefully checked for accuracy and \* adjusted as needed, before they are used in design. \*

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#### SUMMARY OF FAULT PARAMETERS

Gothic, Page 2

| ABBREVIATED<br>FAULT NAME  | APPROX.  | SOURCE         | MAX.  | SLIP     | FAULT        |
|--|----------|----------------|-------|----------|--------------|
| ABBREVIATED  | DISTANCE | TYPE           | MAG.  | RATE     | I TYPE       |
| FAULT NAME   | (km)     | (A,B,C)        | (Mw)  | (mun/yr) | (SS, DS, BT) |
| ABBREVIATED FAULT NAME  SIERRA MADRE (San Fernando) SANTA SUSANA VERDUGO SAN GABRIEL HOLSER SIERRA MADRE (Central) HOLLWOOD SANTA MONICA OAK RIDCE (Onshore) MALIBU COAST RAYMOND SIMI-SANTA ROSA NEWPORT-INGLEWOOD (L.A.Basin) SAN CAYETANO ANACAPA-DOME PALOS VERDES CLAMSHELL-SAWPIT SAN ANDREAS - 1857 Rupture SANTA YNEZ (East) ELSINORE-WHITTIER SAN JOSE VENTURA - PITAS POINT CUCAMONGR M.RIDGE-ARROYO PARIDA-SANTA ANA CHINO-CENTRAL AVE. (Elsinore) GARLOCK (West) PLEITO THRUST RED MOUNTAIN BIG PINE SAN ANDREAS - Southern SAN JACINTO-SAN BERNARDINO ELSINORE-GLEN IVY NEWPORT-INGLEWOOD (Offshore) CLEGHORN WHITE WOLF SANTA YNEZ (West) NORTH FRONTAL FAULT ZONE (West) SAN JACINTO-SAN JACINTO VALLEY HELENDALE - S. LOCKHARDT GARLOCK (East) CORONADO BANK LENWOOD-LOCKHART-OLD WOMAN SPRGS ELSINORE-TEMECULA SANTA RCSA ISLAND GRAVEL HILLS - HARPER LAKE | 1 3.3    | =======<br>  B | 6.7   | 2.00     | DS           |
| SANTA SUSANA   | 5.2      | I B            | 6.6   | 5.00     | l ns         |
| VERDUGO  | 6.1      | 1 B            | 6.7   | 0.50     | l ns         |
| SAN GABRIEL  | 12.4     | В              | 7.0   | 1.00     | 1 55         |
| HOLSER   | 13.9     | i B            | 6.5   | 0.40     | , os         |
| SIERRA MADRE (Central)   | 1 17.4   | . –<br>I B     | 7.0   | 3.00     | I DS         |
| HOLLYWOOD  | 18.4     | . B            | 6.5   | 1.00     | l DS         |
| SANTA MONICA   | 19.9     | I B            | 6.6   | 1.00     | 1 55         |
| OAK RIDGE (Onshore)  | 24.1     | . –<br>1 B     | 6.9   | 1 4 00   | 1 05         |
| MALIBU COAST   | 24.7     | . B            | 6.7   | 0.30     | l DS         |
| RAYMOND  | 27.8     | <br>1 B        | 6.5   | 0.50     | 1 05         |
| SIMI-SANTA ROSA  | 28.8     | i B            | 6.7   | 1.00     | 1 05         |
| NEWPORT-INGLÉWOOD (L.A.Basin)  | 1 28.8   | i B            | 6.9   | 1 00     | 1 88         |
| SAN CAYETANO   | 31.2     | 1 3            | 6.8   | 6.00     | 1 05         |
| ANACAPA-DUME   | 32.3     | i B            | 7.3   | 3.00     | 1 05         |
| PALOS VERDES   | 34.2     | i B            | 7.1   | 3.00     | SS           |
| CLAMSHELL-SAWPIT   | 39.1     | 1 B            | 6.5   | 0.50     | l DS         |
| SAN ANDREAS - 1857 Rupture   | 42.4     | 1 A            | 7.8   | 34.00    | l ss         |
| SANTA YNEZ (East)  | 50.4     | l B            | 7.0   | 2.00     | l 55         |
| ELSINORE-WHITTIER  | 53.6     | B 1            | 6.8   | 2.50     | 1 55         |
| SAN JOSE   | 59.3     | l B            | 6.5   | 0.50     | l DS         |
| VENTURA - PITAS POINT  | 60.8     | l B            | 6.8   | 1.00     | 1 DS         |
| CUCAMONGA  | 65.7     | 1 A            | 7.0   | 5.00     | l ns         |
| M.RIDGE-ARROYO PARIDA-SANTA ANA  | 66.2     | l B            | 6.7   | 0.40     | I DS         |
| CHINO-CENTRAL AVE. (Elsinore)  | 70.6     | l B            | 6.7   | 1.00     | I DS         |
| GARLOCK (West)   | 71.9     | l A            | 7.1   | 6.00     | I SS         |
| PLEITO THRUST  | 1 72.9   | l B            | 1 6.B | 2.00     | I DS         |
| RED MOUNTAIN   | 74.4     | l B            | 6.8   | 2.00     | DS           |
| BIG PINE   | 1 77.4   | 1 B            | 6.7   | 0.80     | l ss         |
| SAN ANDREAS - Southern   | 1 88.2   | A              | 7.4   | 24.00    | SS           |
| SAN JACINTO-SAN BERNARDINO   | 89.9     | B              | 6.7   | 12.00    | l ss         |
| ELSINORE-GLEN IVY  | 90.9     | B              | 6.8   | 5.00     | i ss         |
| NEWPORT-INGLEWOOD (Offshore)   | 1 92.3   | l B            | 6.9   | 1.50     | I SS         |
| CLEGHORN   | 1 93.9   | В              | 6.5   | 3.00     | I SS         |
| WHITE WOLF   | 99.0     | l B            | 7.2   | 2.00     | I DS         |
| SANTA CRUZ ISLAND  | 99.8     | I B            | 6.B   | 1.00     | I DS         |
| SANTA YNEZ (West)  | 1 108.0  | i B            | 6.9   | 2.00     | l ss         |
| NORTH FRONTAL FAULT ZONE (West)  | 110.7    | l B            | 7.0   | 1.00     | I DS         |
| SAN JACINTO-SAN JACINTO VALLEY   | 118.2    | B              | 6.9   | 12.00    | 1 55         |
| HELENDALE - S. LOCKHARDT   | 120.0    | B              | . 7.1 | 0.60     | l SS         |
| GARLOCK (East)   | 1 120.3  | A              | 7.3   | 7.00     | l ss         |
| CORONADO BANK  | 123.0    | [ B            | 7.4   | 3.00     | l ss         |
| LENWOOD-LOCKHART-OLD WOMAN SPRGS   | 124.4    | i B            | 7.3   | 0.60     | 1 55         |
| ELSINORE-TEMECULA  | 1 125.9  | l B            | 6.8   | 5.00     | l SS         |
| SANTA RCSA ISLAND  | 133.5    | E ]            | 6.9   | 1.00     | DS           |
| GRAVEL HILLS - HARPER LAKE   | 1 144.6  | В              | 6.9   | 0.60     | l SS         |
|  |          |                |       |          |              |

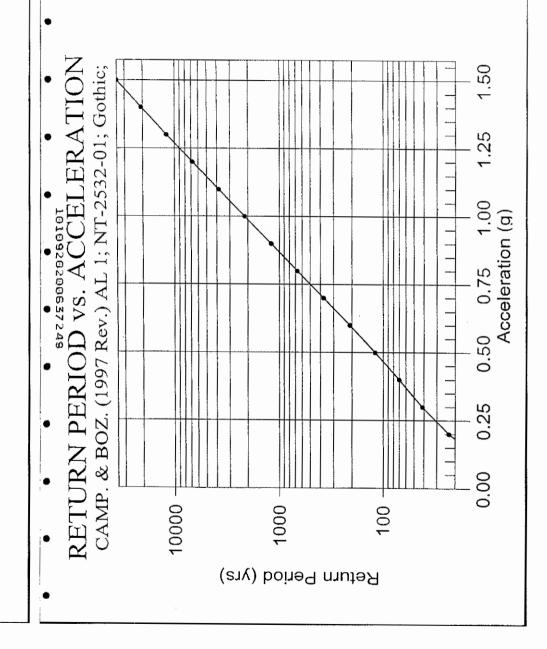
# SUMMARY OF FAULT PARAMETERS

Gothic, Page 3

|   | APPROX.   | SOURCE  | MAX.  | SLIP<br>  RATE | FAULT        |
|---|-----------|---------|-------|----------------|--------------|
| ABBREVIATED   | IDISTANCE | TYPE    | MAG.  | RATE           | TYPE         |
| FAULT NAME  | (km)      | (A,B,C) | (MW)  | (mm/yr)        | (SS, DS, BT) |
| FAULT NAME  |           | ======  |       |                | +            |
| So. SIERRA NEVADA   | 1 147.2   | 9       | 7.1   | 0.10           | l DS         |
| LOS ALAMOS-W. BASELINE  | 1 150.4   | l B     | 6.8   | 0.70           | 1 DS         |
| NORTH FRONTAL FAULT ZONE (East)   | 154.2     | B       | 6.7   | 0.50           | l DS         |
| SAN JACINTO-ANZA  | 155.9     | I A     | 7.2   | 12.00          | I SS         |
| BLACKWATER  | 157.6     | I B     | 6.9   | 0.60           | l SS         |
| ROSE CANYON   | 1 160.2   | 1 B     | 6.9   | 1.50           | I SS         |
| LANDERS   | 161.3     | 1 B     | 7.3   | 0.60           | I SS         |
| PINTO MOUNTAIN  | 1 163.8   | В       | 7.0   | 1 2.50         | 55           |
| CALICO - HIDALGO  | 164.6     | В       | 7.1   | 0.60           | 55           |
| SAN JUAN  | 1 166.8   | 1 B     | 7.0   | 1 1.00         | 22           |
| LITTLE LAKE   | 167.1     | В       | 6.7   | 0.70           | l SS         |
| LIONS HEAD  | 167.5     | B       | 6.6   | 0.02           | 20 1         |
| JOHNSON VALLEY (Northern)   | 167.6     | i a     | 6.7   | 0.60           | 1 55         |
| ELSINORE-JULIAN   | 168.1     | i A     | 7.1   | 5.00           | 1 55         |
| SAN LUIS RANGE (S. Margin)  | 172.2     | B       | 7.0   | 0.20           | i ns         |
| EMERSON So COPPER MIN.  | 181.2     | B       | 1 6 9 | 0.20           | 1 00         |
| CASMALIA (Orcutt Frontal Fault)   | 1 183.5   | i B     | 6.5   | 1 0.00         | 1 00         |
| TANK CANYON   | 1 189 7   | l B     | 6.5   | 1 1 00         | l DC         |
| BURNT MTN.  | 1 191.9   |         | 6.5   | 0.60           | 1 00         |
| EUREKA PEAK   | 1929      | l B     | 6.5   | 1 0.60         | , 33         |
| PISGAH-BULLION MTN -MESCHITE LK   | 1935      | l B     | 1 7 1 | 0.60           | 1 55         |
| LOS OSOS  | 1 201 6   | 1 13    | 6.8   | 0.60           | 1 22         |
| SAN JACINTO-COVOTE CREEK  | 1 203.1   | 1 0     |       | 4.00           | 1 05         |
| PANAMINI VALLEY   | 205.1     | , B     | 7 2   | 3.00           | 1 55         |
| OWL LAKE  | 209.3     | 1 5     | 6.5   | 2.50           | 1 55         |
| PARTHODAKE UNLIEV   | 1 213 0   | 1 5     | . 6.5 | 2.00           | 1 55         |
| NOSCRT  | 213.0     | 1 5     | 1 7 3 | 2.00           | 1 55         |
| OWENS VALLEY  | 1 213.1   | , ,     | 1 7.5 | 2.50           | 1 55         |
| RINCONDO  | 1 210.0   | , 5     | 1 7 3 | 1 1.30         | 1 55         |
| DEATH VALLEY (South)  | 1 210.0   | 1 6     | 1 6 0 | 1.00           | 55           |
| SAN JACINTO - BORRECO   | 240.0     |         | 0.9   | 4.00           | 88           |
| ELSINORE-COYOTE MOUNTAIN  | 1 242.1   |         | , 6.6 | 4.00           | 1 55         |
| INDEPENDENCE  | 1 253.5   |         | 0.0   | 1 4.00         | 58           |
| DEATH VALLEY (Grahon)   | 250.4     | . 5     | 0.9   | 0.20           | i DS         |
| HINTED MEN - CATTAR UNITED  | 1 251.3   |         | 0.9   | 4.00           | l DS         |
| SAN SNODERS (Crospins)  | 1 203.1   | 1 5     | 1.0   | 2.50           | SS           |
| SUDFOCETETON MEN (Con Topintal  | 1 270.7   | , b     | 3.0   | 34.00          | 55           |
| DEPARTS CETTAIN AIN. (San Jacinto)  | 2/5.3     | 1 8     | 6.6   | 5.00           | SS           |
| ELMORE DINCH  | 275.5     |         | 6.5   | 25.00          | ŞS           |
| CHDERCETTYON HITTE (C I   | 278.5     | l B     | 6.6   | 1.00           | SS           |
| DEPTH WALLEY (Newspace)   | 280.8     |         | 1 6.6 | 4.00           | 55           |
| ELCTHODE TROUBLE CATADA   | 292.7     | I A     | 1.2   | 5.00           | ŞS           |
| PIDCE COLDA   | 294.8     | . в     | 1.0   | 3.50           | 5S           |
| TMDED TRI   | 1 300.8   | 1 3     | 0.5   | 0.70           | DS           |
| WUTTE MCINERTHE   | 1 307.5   | A       | 7.0   | 20.00          | 55           |
| ABBREVIATED FAULT NAME  SO. SIERRA NEVADA LOS ALAMOS-W. BASELINE NORTH FRONTAL FAULT ZONE (East) SAN JACINTO-ANZA BLACKWATER ROSE CANYON LANDERS FINTO MOUNTAIN CALICO - HIDALGO SAN JUAN LITTLE LAKE LIONS HEAD JOHNSON VALLEY (Northern) ELSINORE-JULIAN SAN LUIS RANGE (S. MARGIN) EMERSON SO COPPER MIN. CASMALIA (Orcut Frontal Fault) TANK CANYON BURNT MIN. EUREKA PEAK PISGAH-BULLION MINMESQUITE LK LOS OSOS SAN JACINTO-COYOTE CREEK PANANINT VALLEY HOSGRI OWENS VALLEY RINCONADA DEATH VALLEY (South) SAN JACINTO - BORREGO ELSINORE-COYOTE MOUNTAIN HODEPENDENCE DEATH VALLEY (Graben) HUNTER MIN SALINE VALLEY SAN ANDRRAS (Creeping) SUPERSTITION MIN. (San Jacinto) BRAWLEY SEISMIC ZONE ELMORE RANCH SUPERSTITION HILLS (San Jacinto) DEATH VALLEY (Northern) ELSINORE-LAGONA SALADA BIRCH CREEK IMPERIAL WHITE MCUNTAINS ROUND VALLEY (E. of S.N.Mtns.) | 1 303.0   | l B     | 1 (.1 | 1.00           | 55           |
| MOUND VALLET (E. OI S.M.MINS.)  | 330.8     | і в     | 6.8   | 1.00           | l DS         |

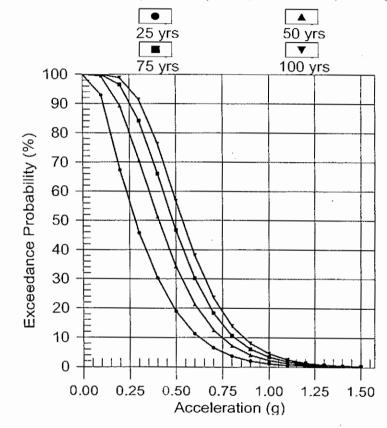
Gothic, Page 4

| ABBREVIATED   | APPROX.   |           |       |         | FAULT<br>TYPE           |
|---|---|-----------|-------|---------|-------------------------|
| FAULT NAME  | ( km)   | (A, B, C) | (Mw)  | (mm/yr) | (SS, DS, BT)            |
| DEEP SPRINGS  | 331.1   |           |       |         | •                       |
| FISH SLOUGH   | 343.2   | В         | 6.6   | 0.20    | DS                      |
| DEATH VALLEY (N. of Cucamongo)  |   |           |       |         |                         |
| ORTIGALITA  | 1 346.2<br>1 354.7  | l B       | 6.9   | 1.00    | SS                      |
| HILTON CREEK  | 1 355.2   | l B       | 6.7   | 2.50    | DS                      |
|   |   |           |       |         |                         |
| MONTEREY BAY - TULARCITOS   | )   360.0<br>  363.7<br>  366.3<br>  373.1<br>  376.5<br>  396.8<br>  396.8<br>  411.0<br>  438.5 | l B       | 7 1   | 0.50    | DS                      |
| PALO COLORADO - SUR   | 366.3   | i B       | 7.0   | 3.00    | l SS                    |
| QUIEN SABE  | 373.1   | i a       | 6.5   | 1.00    | SS                      |
| HARTLEY SPRINGS   | 1 376.5   | I B       | 6.6   | 0.50    | DS                      |
| ZAYANTE-VERGELES  | 1 391.6   | I B       | 6.8   | 0.10    | SS                      |
| SARGENT   | 396.8   |           | 6.8   | 00.5    | l SS                    |
| SAN ANDREAS (1906)  | 1 396.8   | A         | 7.9   | 24 00   | l SS                    |
| MONO LAKE   | 1 411.0   | i B       | 6.6   | 2 50    | DS                      |
| SAN GREGORIO  | 438.5   | 1 2       | 7.3   | 5.00    | l SS                    |
| ROBINSON CREEK  | 441.1   | B         | 6.5   | 0.50    | l DS                    |
| SAN GREGORIO ROBINSON CREEK GREENVILLE MONTE VISTA - SHANNON HAYWARD (SE Extension) CALAVERAS (No.of Calaveras Res HAYWARD (Total Length) ANTELOPE VALLEY GENOA | 446.6   | l B       | 6.9   | 1 2.00  | l SS                    |
| MONTE VISTA - SHANNON   | 1 446.7   | ) A       | 6.5   | 0.40    | I DS                    |
| HAYWARD (SE Extension)  | 446.7   | I B       | 6.5   | 3.00    | l SS                    |
| CALAVERAS (No. of Calaveras Res   | 1 466.4   | i B       | 6.8   | 5.00    | I 55                    |
| HAYWARD (Total Length)  | 466.4   | 4 1       | 7 7   | 9 00    | 55<br>55                |
| ANTELOPE VALLEY   | 1 479.9   | i B       | 6.7   | 0.80    | DS                      |
| ANTELOPE VALLEY GENOA   | 502.7   | i B       | 6 9   | 1 1 00  | DS                      |
| CONCORD - GREEN VALLEY  | 579.8<br>  502.7<br>  514.1<br>  552.5<br>  553.6<br>  571.1<br>  576.5<br>  615.1                | 1 19      | 1 6 9 | 1 6 00  | l ss                    |
| RODGERS CREEK   | 552.5   | 1 2       | 7.0   | 1 9.00  | l SS                    |
| WEST NAPA   | 553.6   | ,<br>I B  | 1 6.5 | 1 1 00  | l SS                    |
| POINT REYES   | 1 571.1   | i B       | 6.8   | 0.30    | l DS                    |
| HUNTING CREEK - BERRYESSA   | 576.5   | i B       | 6.9   | 6.00    | SS                      |
| MAACAMA (South)   | 615.1   | i B       | 6.9   | 0.00    | l SS                    |
| COLLAYOMI   | 632.2<br>636.3<br>656.4<br>715.9  | i B       | 6.5   | 1 0 60  | l SS                    |
| BARTLETT SPRINGS  | 1 636.3   | i A       | 7.1   | 1 6 00  | l SS                    |
| MAACAMA (Central)   | 656.4   | I A       | 7.1   | 9.00    | SS                      |
| MAACAMA (North)   | 715.9   | i A       | 7.1   | 9.00    | l SS                    |
| ROUND VALLEY (N. S.F.Bay)   | 722.8   | i B       | 1 6.8 | 6.00    | SS                      |
| BATTLE CREEK  | 752.7   | i B       | 6.5   | 0.50    | DS                      |
| LAKE MOUNTAIN   | 722.8<br>752.7<br>780.9   | l B       | 6.7   | 6.00    | SS                      |
| GARBERVILLE-BRICELAND   | 797.4   | i B       | 6.9   | 9.00    | l SS                    |
| MENDOCINO FAULT ZONE  | 852.9   | i Ā       | 1 7.4 | 35.00   | i DS                    |
| LITTLE SALMON (Onshore)   |   |           |       | 5.00    |                         |
| MAD RIVER   | 863.8   | i B       | 7.1   | 0.70    | DS                      |
| CASCADIA SUBDUCTION ZONE  | 866.1   |           |       |         |                         |
| McKINLEYVILLE   | 874.2   | ] B       | 1 7.0 | 0.60    | l DS                    |
| TRINIDAD  | 1 875.9   | 1 B       | 1 7.3 | 2.50    | l ns                    |
| FICKLE HILL   | 876.0   | l B       | 6.9   | 0.60    | i DS                    |
| FICKLE HILL<br>TABLE BLUFF  | 876.0<br>880.8  | В         | 7.0   | 0.60    | DS                      |
| LITTLE SALMON (Offshore)  | 1 894 2   | 1 2       | 1 7 1 | 1 100   | l DS                    |
| BIG LAGOON - BALD MTN.FLT.ZONE  | 912.8   | 1 B       | 7.3   | 1 0.50  | l DS                    |
| **********  | *********   | *****     |       |         | hadrahad aran di di ing |



# PROBABILITY OF EXCEEDANCE

CAMP. & BOZ. (1997 Rev.) AL 1; NT-2532-01; Gothic;



1010920200657249

10109202006372

Appendix C

Field Resistivity Test

Project No NT-2532-01

Site Name: Gothic (CA-8103-B)

Site Address: 16231 San Fernando Mission Boulevard, Granada Hills, California.

Report Prepared by: Geotechnical Solutions, Inc.

Give two or three sentences description of the soil as seen at the site: Gray, moist, and medium dense, fine to medium grained Sands,

Soil Condition:

1010920200637249

□ Wet □ Damp ☐ Dry

Choose one and only one of the following descriptions that best describe the earth

☐ Good clay earth

Sandy soil

☐ Solid rock

☐ High-Rise site

If high-rise site was checked, verify the location of the main water line entering the building and give the following information:

☐ The line was located and verified as copper and is \_\_\_\_\_ inches in circumference.

☐ The line was located and verified as iron and is inches in circumference.

☐ I was unable to locate the water main and recommend further engineering study for the grounding of this site.

Provide the following information:

Date of Resistivity test: 3/4/04

Weather for the seven days preceding the test: Sunny and moderately warm (The last three days must have been clear and sunny.)

Model number of test instrument: NILSON MODEL 400 Serial number of test

instrument: 4-7368

Project No NT-2532-01 Gothic (CA-8103-B)

Project Name: Gothic (CA-8103-B)

Date: 3-4-04

Project No: NT-2532-01

1010920200637

N

49

Site Address: 16231 San Fernando Mission Boulevard, Granada Hills, California.

#### RESISTIVITY DATA

| A= (ft)               | 5              | 10                                      | 20     | 30     | 40     |
|-----------------------|----------------|---|--------|--------|--------|
| Formula =<br>(Ohm-cm) | 957.5*R        | 1915*R                                  | 3830*R | 5745*R | 7660*R |
| Area 1<br>Measured R  | 3.0            | 1.0                                     |        |        |        |
| Area I<br>Calc        | 2871<br>Ohm-cm | 1915<br>Ohm-cm                          |        |        |        |
| Area 2<br>Measured R  |                |   |        |        |        |
| Area 2<br>Calc        |                |   |        |        |        |
| Area 3<br>Measured R  |                |   |        |        |        |
| Area 3<br>Calc        |                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |        |        |        |
| Area 4<br>Measured R  |                |   |        |        |        |
| Area 4<br>Calc        |                |   |        |        |        |

Date of Calibration: 3/2004

Field Engineer: Mo

#### Department of Building and Safety GRADING DOCUMENT MICROFILM SHEET

■Use a separate microfilm sheet for each document type.

| For multiple legal descriptions and/or addre<br>mumber on the first blank of the legal descrip-<br>legal descriptions, write the number 1 on each  | sses, link the | legal descrip | ntion with the   | correspondir<br>For example, | ng address by writing a<br>if one address has two |
|--|----------------|---------------|--|------------------------------|---|
| Tract 21327 Tract 71327 Tract 721327 Address 16201 W. Se Address Address   |                |               | Blk<br>Blk<br>Blk  | Lot Lot Uni                  | Fr.of ((Arb 2)                                    |
|  | DOCUM          | MENT TYPE     |  |                              |   |
| Name   | ······         |               | Document D:  | ite(s)                       |   |
| Crading Compaction File (5)  Grading Department Letter (7)  Methane Control File  Contaminated Soil File  E. I. R. File  Other  Grading Foundation File (1)  Grading Seismology File (6)  Grading Soils/Geo File (2)  Grading Storm Damage File (17)  Grading Information Only (9)  Grading Responsibility Letter (18)  Grading Tentative Tract (51)  Grading Oversize Document (92) | LtrLtrLtrLtr   | 3/05          | Rpts | 3/10/0                       | 4   |
| Any comment printed on the line below wil  |                | BASE COM      |  | ild:                         |   |
| DOCUME   | ENT PREPA      | RATIONAN      | D RETENT   | ION                          | AU - 484 4  |
| Reviewed by D  | ocument(s) S   | tored in Reco | rds Retention  | Box Number                   | f   |

46870 LAD&S 8-17 (FI 2/01) City of Los Angeles DEPARTMENT OF BUILDING AND SAFETY District ADDRESS APPROVED Grading Division Signature/Date APPLICATION FOR REVIEW OF TECHNICAL REPORTS AND IMPORT-EXPORT ROUTES INSTRUCTIONS A. Address all communications to the Grading Division, Department of Building and Safety, 201 N. Figueroa St., 3rd Fl., Los Angeles, California 90012-4869. Phone (Area Code 213) 977-6329. B. Obtain address approval from the Department of Public Works prior to submittal. C. Submit 2 copies (4 for fault study zone) of reports and 3 copies of application with items (1) through (10) completed. D. Check should be made to the Department of Building and Safety. 1 LEGAL DESCRIPTION 2 PROJECT Tract 217-27 (3) OWNER COL Address P.O. Poor 8270 City Tryme City You Nox Phone (Daytime) 714.7139720Zip 92602 Zip THOS Fax 714. 208.4949 Phone (Daytime) 818.-402.7286 (6) Report (5) Report(s) Prepared by Date(s) (7) Status of project: ☐ Storm Damage ☐ Under Construction (8) Previous site reports? If yes, give date(s) of report(s) and name of company(s) who prepared report(s). Previous Department actions? \_\_\_\_\_\_ If yes, please give dates and attach a copy to expedite processing. Dates Signature of applicant (DEPARTMENT USE ONLY) REVIEW REQUESTED & PROCESSING REVIEW REQUESTED & PROCESSING FEES FEE\$ Foundation Investigation Seismology report per 91.2305(d) Soils Engineering 246 □ Environmental Assessment ☐ Geology ☐ Import-Export Route Combined Soils Engr. & Geo! Division of land ☐ Supplemental Sub-total ☐ Combined Supplement One Stop Surcharge 27,40 THE REPORT IS 
APPROVED WITH CONDITIONS NOT APPROVED TOTAL FEE DEPARTMENT. ACTION BY: Date For Soils & Foundation For Geology Reasons for Non-Approval See Attached letter Languagemental Sheet; and Attached Conditions of Approval 1. PROUDL' SUIL MADPORT FOR MY SIR! THE WHITTED \$240.00 \$4.80 CITY FLANNING SURCH \$7,20 MIKSION SLUD \$271.40 Total Due: \$271.40 (Cashier Use Only) (Continued Over) DEPARTMENT USE ONLY DISTRIBUTION Soil Engineer LA Plan Check ☐ LA Inspection

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|                                       | NEXTEL COMMUNICATION  |
|                                       | TELECOMMUNICATION FACILITY GOTHIC (CA-8103-B)                     |
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| ·                                     | IRVINE, CALIFORNIA 92602  |
|                                       | PROJECT NO: NT-2532-01  |
| ·                                     | MARCH 10, 2004  |
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|                                       | GEOTECHNICAL SOLUTIONS, INC. GEOTECHNICAL & ENVIRONMENTAL         |
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### Geotechnical Solutions, Inc.

Geotechnical, Structural & Environmental Engineering

March 10, 2004

Nextel Communications 310 Commerce Irvine, California 92602

Attention: Mrs. Amy Sinon

RE: Gothic (CA-8103-B) 16201 San Fernando Mission Boulevard Granada Hills, California

#### Gentlemen:

Submitted herewith is the report of the Geotechnical Engineering study conducted by this office at the proposed Nextel Communication cellular transmission center. The project site is within existing Otis Gordon Sports Park located at San Fernando Avenue, in the City of Granada Hills, California.

Based on the investigation findings, it is concluded that development of the project is feasible from a geotechnical point of view. Proposed equipment shelter may be supported by conventional continuous footings bearing on existing subgrade soils and moderately deep cast-in-place piers will be the most suitable foundation system for the proposed 62-foot high monopalm.

The closest known active fault capable of producing a major earthquake is Sierra Madre (San Fernando) Fault, which is located about 2.0 miles (3.3 km) away from the site.

The site does not lie within or near an Alquist-Priolo Earthquake Fault Zone as designated by the California Geological Survey, potential for direct surface fault rupture at the site is considered unlikely.

Project No NT-2532-01 Gothic (CA-8103-B)

The investigation was made in accordance with generally accepted geotechnical engineering principles and procedures and included such field and laboratory tests considered necessary under the circumstances. In the opinion of the undersigned, the accompanying report has been substantiated by mathematical and other data and presents fairly the design information requested by your organization.

Respectfully submitted,

Geotechnical Solutions, Inc.

SPERIOR

Dharma Shakya, Ph.D., P.E. Sr. Project Engineer PROFESSIONAL CHARACTER STATE OF COLUMN AND COSCIOLOGY TO CHARACTER STATE OF COSCIOLOGY TO COS

Abraham S. Baha, P.E. Principal



Distributiou: (3) Nextel Communications

Phone: (949) 453-0406

27 Mauchly, Suite 210, Irvine, CA 92618 1010713200633635

Fax: (949) 453-0409

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#### Introduction

The primary objectives of this study were to explore subsurface conditions beneath the project site and evaluate the existing earth materials relative to foundation support and lateral pressure design factors.

In general, the study objectives were met by a visual reconnaissance of the site and vicinity, review of available tentative development plans, exploratory drilling, seismic evaluations, and engineering analysis. The general scope and objectives of the study were established in collaboration with the client.

#### Proposed Construction

The project will consist of construction of a 62-foot high monopalm and an equipment shelter inside an existing shopping center at the subject leased area. The cellular facility will be in an area will be at the asphalt concrete parking area. The design vertical load of the monopalm will not exceed 60 kips, and horizontal shear force will vary in relation to the height of the pole and transient loads.

#### Site Description

The proposed project site lies on a relatively flat ground and access to the site is via Woodley Avenue through an asphalt concrete driveway. The site is within a developed facility north of San Fernando Avenue and west of Woodley Avenue in the Granada Hills, County of Los Angeles, California. Subject leased area is located at the northeast portion of the property as shown on Plate B.

#### Seismic Conditions

The site does not lie within or near an Alquist Priolo Earthquake Fault Zone as designated by the California Geological Survey; therefore potential for direct surface fault rupture is considered unlikely.

UBCSEIS version 1.03 a computer program show that Sierra Madre (San Fernando) Fault to be closest to the site. The tabular data for UBCSEIS indicates that the Sierra Madre (San Fernando) Fault to be 2.0 miles (3.3 km). The Sierra Madre (San Fernando) Fault has been assigned a maximum earthquake magnitude of 6.7, is a Type B fault, and has a slip rate of 2.0 mm per year. The site lies in Seismic Zone 4 (1997 UBC).

Probabilistic risk analyses were performed using the computer program FRISKSP, 2000 Edition, by Blake. The fault database was provided from the California Geological Survey (CGS). FRISKSP models earthquake sources as three dimensional planes and computes site specific probabilities of exceedance of given acceleration levels or pseudorelative velocity levels for each earthquake source. The cumulative effects from all modeled earthquake sources are tabulated and graphically plotted. The program offers a choice of attenuation relationships by various researchers to evaluate the attenuation of earthquake energy with source distance. For this study the attenuation relationship developed by Campbell & Bozorgnia (1997) was used for the underlying alluvial soil type. The calculated peak ground acceleration using the attenuation relationship for a ten percent chance of exceedance in 50-years or a return period of 475-years was 0.74g.

#### Exploration

The field investigation consisted of subsurface exploration by means of one test boring to a maximum depth of 36.5 feet; made with an eight-inch hollowstem drill rig and encountered refusal below due to the boulders. Approximate boring location is shown on Plate B. A continuous record of the soils encountered during exploratory drilling was made by the field engineer and is presented on plate D.

It should be noted that lines designating interfaces between soil strata on the boring log represent approximate boundaries since the actual transition between materials is somewhat gradual. Undisturbed samples were secured at frequent depth intervals for

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laboratory examination and testing. Disturbed bulk samples representative of the surficial subgrade materials were also obtained.

The relative sampler penetration resistance exhibited by the deposit's sample is tabulated in the Blow Per Foot column of the pertinent boring logs. Recorded blow counts for 12 inches of sampler penetration was medium to high. Ground water was not encountered at the full depth of exploration and caving did not occur during this exploratory drilling operation.

#### Soils Condition

Significant fill was not encountered at the boring location during the exploratory drilling. The underlying natural soil is generally, fine silty, slightly clayey sands with layers of gravel in the upper zone. A more detailed soil profile is shown on Plate C Log of Test Hole.

#### Laboratory Testing

Laboratory testing was programmed following a review of field investigation data and after considering the various foundations, floor slabs, and grading elements to be evaluated. In general, this includes physical testing to establish foundation-bearing characteristics, and classification tests.

#### A. Moisture and Density

In situ moisture content and density were determined for all the undisturbed core samples obtained during test boring drilling operations. Test results are tabulated on Plate C Log of Test Hole.

#### B. Mechanical Analysis

The texture composition of a selected typical sample determined by the hydrometer test method was as follows:

| Boring | Depth  | Percent | Percent | Percent |
|--------|--------|---------|---------|---------|
| No.    | (Feet) | Sand    | Silt    | Clay_   |
| 1      | 1-2    | 63      | 22      | 15      |

#### C. Direct Shear

Direct shear tests were performed on undisturbed natural samples of soil encountered within the full depth explored, and were considered most pertinent in the design of shallow spread footings, and moderately deep pier. Tests were performed in the saturated-drained moisture. Individual test results are shown on Plate D.

#### D. Expansion

Expansion characteristics were determined by the Expansion Index test of a typical bulk sample considered to be generally representative of the near subgrade soils. Test results are as follows:

| Boring | Moisture | Dry Density | Expansion Index |
|--------|----------|-------------|-----------------|
| No.    | (%)      | (pcf)       |                 |
| 1      | 10.9     | 107.4       | 18              |

According to the unified Building Code, Table 18-I-B, the upper soil is classified as low expansive.

#### E. Consolidation

Consolidation (load deformation) test was performed on undisturbed samples at selected depths. Plotted test results are presented on Plates E through G.

#### F. Chemical Analysis

Chemical sulfate analysis was performed on a representative sample by the CAL 417-A method. A soluble sulfate of 155 parts per million was indicated, therefore, type II Portland cement should be used for the foundation elements in contact with the soil.

Project No NT-2532-01 Gothic (CA-8103-B)

#### Design Values

Representative values were selected from the test data and other sources for design and is tabulated below:

| Field Density              | 120 pcf    |
|----------------------------|------------|
| Expansion Index            | 18         |
| Angle of Internal Friction | 25-31 deg  |
| Cohesion                   | 150-250 ps |

Subgrade Reaction (K)

100 pci

#### Earthquake Induced Liquefaction Potential

Earthquake-induced vibrations can be the cause of several significant phenomena, including liquefaction in fine silt and sands. Liquefaction results in a complete loss of strength and can cause structures to settle or even overturn, if it occurs in the bearing zone. If liquefaction occurs beneath sloping ground, a phenomenon known as Lateral Spreading can occur. Liquefaction is typically limited to the upper fifty (50) feet of the subsurface of the soils.

Four items are generally considered to have the most significance in liquefaction:

- Poorly graded fine and silty sands are the types of soils most susceptible to liquefaction. Soils that contain a wide range of soil particle sizes and coarse soils that drain freely are not generally susceptible to liquefaction.
- The water table perched or otherwise, usually must be within the upper fifty (50) feet of soils, for liquefaction to occur. Soils above the water table do not liquefy.
- Liquefaction has been shown to be unlikely where the relative density of the soils
  is greater than 70%. A soil that has relative density of less than 70% may liquefy

depending on a number of factors. The two most important of which are the strength and duration of the seismic shaking and the percentage of the soil particles that are silt and clay sized.

4. If the clay content (determined by the percent finer than 0.005 mm) is greater than (15%) percent, the soil is usually considered non-liquefiable, unless it is extremely sensitive.

The site will be susceptible to liquefaction, if all four items discussed above meet the criteria. An examination of the existing conditions at the site, in relation to the criteria listed above, indicates the following:

- Determination of soil gradation shows that the underlying soil particle sizes are very fine to fine silty, clayey sands.
- 2. Groundwater was not encountered at the full depth of exploration.
- Standard Penetration Tests (SPT) indicates that the soil within the depth range studies is in a medium to high state, with a relative density of over 70 percent.
- 4. The soil contains about 15% of clay constituent.

Based upon the evaluation of above criteria and our preliminary screening, it is our opinion that a potential for earthquake induced liquefaction is low at the subject site, and earthquake induced liquefaction potential will not be considered a constraint for this development which will not be used as a human occupancy structure.

#### Conclusions and Recommendations

It is concluded that the site will be suitable for the proposed construction described in this report, provided that the design and construction are properly executed. Our recommendations are based on site conditions encountered during the exploration,

Project No NT-2532-01 Gothic (CA-8103-B)

laboratory tests, and experience with similar sites, and are in accordance with generally accepted procedures of geotechnical engineering.

#### Foundation Support

Support of the proposed monopalm by a moderately deep caisson and the equipment building by continuous footings are the most suitable and economical foundation system and are recommended.

#### Equipment Building

The equipment shelter and enclosure walls may be supported by an 18-inch deep continuous footing. The footings should be extended at least 12 inches into natural material. An 18-inch deep and 12-inch wide continuous footing resting on natural subgrade or newly compacted fill soil may be designed for an allowable bearing value of 1,500 pounds per square foot. The estimated settlement will be less than one-half of an inch.

Recommended bearing values are for dead plus live loads and may be increased one-third for combined dead, live, and seismic forces.

All continuous footings should be incorporated with minimum 2#4 bar at the top and 2#4 bar at the bottom or as specified by the Structural Engineer.

#### Pier Foundation

It is understood that a 62-foot high monopalm will be constructed at the site. A cast-inplace reinforced concrete pier may be used for support of the proposed monopalm.

The lateral forces will be the controlling element in this case depending on the height of the structure and wind load. Therefore, it is recommended that the minimum pier diameter should be 48 inches and should be extended to a minimum depth of 15 feet into natural soil.

The pier may be designed for an allowable end bearing of 3,000 pounds per square foot or for an average frictional resistance of 100 pounds per square foot. Either skin resistance or end bearing will provide adequate foundation support for the pier.

It is recommended that concrete be placed immediately after drilling. The concrete for the pier should be placed through tremmie or other directional devices. Pier drilling operations should be subject to observation by this office to confirm the conditions encountered are consistent with the conclusions and recommendations of this report and/or to make any appropriate modifications, if necessary.

#### Lateral Passive Pressure

Horizontal forces may be resisted by the combined effect of friction resistance of 0.40 times the dead load and a passive pressure of 300 pounds per square foot per foot of depth. The weight of the pile may be neglected. If combining friction and passive resistance, the friction component shall be reduced by 1/3.

The allowable bearing capacity and the allowable resistance of horizontal forces may be increased 1/3 for earthquakes and other transient forces.

#### Floor Slab

Based on test results, the underlying surface soils are very low expansive, therefore, special measures will not be required for expansion mitigation. The slab should be incorporated with minimum reinforcement of # 3 bars 18 inches center to center each way or as specified by the Structural Engineer. The slab thickness should be 4 inches minimum and should be placed over approved subgrade soils.

#### Seismic Factors

a. Soil Profile Type = Type  $S_D$ 

b. Seismic Zone

8

= 4

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c. Seismic zone Factor

= 0.4

d. Fault Distance

= 2.0 miles (3.3 km)

d. Seismic Source Type

= Type B

e. Seismic Coefficient

 $C_a = 0.44 N_a$ 

 $C_v = 0.64 N_v$ 

f. Near Source Factor

 $N_a = 1.2$ 

 $N_{\rm e} = 1.4$ 

g. Earthquake Magnitude

= 6.7

h. Maximum Slip Rate

= 2.0 mm / year.

i. Probabilistic ground acceleration

= 0.74g

#### Field Resistivity

Resistivity tests were performed at the field using NILSSON Model 400 Soil Resistance Meter by driving 4 test rods 12 inches deep into the ground in a straight line with a uniform distance of 5 and 10 feet in the same line. Test results and the field engineer's report are enclosed in Appendix C.

#### Corrosivity

A major factor in determining soil corrosivity is electrical resistivity. The electrical resistivity of a soil is a measure of its resistance to the flow of electrical current. Corrosion of buried metal is an electrochemical process in which the amount of metal loss due to corrosion is directly proportional to the flow of electrical current (DC) from the metal into the soil. Corrosion currents, following Ohm's Law, are inversely proportional to soil resistivity. Lower electrical resistivities result from higher moisture and chemical contents and indicate corrosive soil. Other soil characteristics that can influence corrosivity toward metals are pH, chemical content, soil types and site drainage

Based on the test results the soils are classified as mildly corrosive to ferrous metals and non-corrosive to Portland cement concrete. Therefore it is recommended to use Type II Portland cement for all concrete elements in contact with soil. Ferrous metals and pipes should be properly coated and wrapped.

#### Grading Procedures

No major grading will be required at this site, other than footing excavation, pier drilling and utility trench backfill. The following are the general grading procedures.

- a. The site for proposed development should be cleared of existing asphalt concrete and any unsuitable material to be hauled off site.
- b. The equipment shelter area should be scarified and compacted at the surface subject to observation and approval by soil engineer.
- c. On-site materials are acceptable for backfill if moisture conditioned and rocks over 3 inches are removed. The moisture content of the soil at the surface may be higher than optimum moisture, and may require aerating. If required, import fill should consist of clean, granular, non-expansive soils free from vegetation, debris or rocks larger than three inches in size. The Expansion Index value should not exceed a maximum of 20.
- d. All recompacted native and import soil should be spread, watered or aerated, mixed and compacted by mechanical means of approximately six-inch thick lifts. The minimum degree of compaction obtained should be at least 90 percent of the ASTM D-1557-00 Laboratory test standard.
- e. Backfill placed in narrow, restricted areas such as along utility trenches, may be placed in 12 to 18 inch thick lifts, provided; the minimum required degree of compaction is obtained.

Project No NT-2532-01 Gothic (CA-8103-B)

> f. Observation and testing of all compaction should be under the direction of the Geotechnical Engineer. The Engineer should be notified at least two days in advance of the start of the grading.

#### Recommendations for Construction

Surveying. The contractor shall set necessary stakes to verify lines and grades as shown on the plan. The owner or his representative shall monitor the work to verify that the depth of footing embedment is correct.

Pier Drilling. Drilling operation of the pier and footing excavations should be observed by a representative of Geotechnical Solutions, Inc.

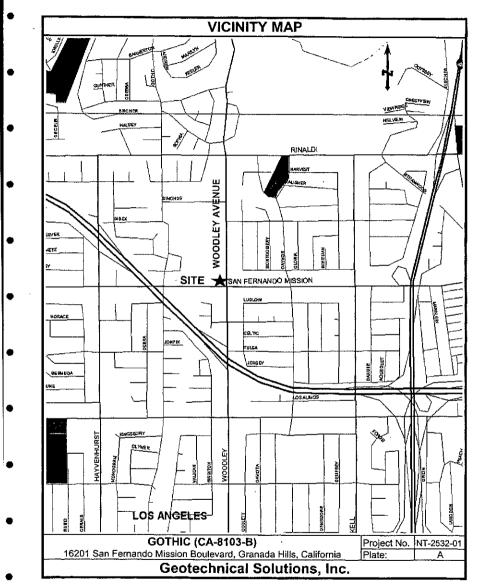
#### Limitations

This report is issued with the understanding that it is the responsibility of the owner or his representative to see that the information and recommendations contained herein are called to the attention of the other members of the design team for the project and that the applicable information is incorporated into the plans, and that the necessary steps are taken to see that the contractors and the subcontractors carry out such recommendations. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or due to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes outside of our control. The validity of the recommendations of this report assumes that Geotechnical Solutions, Inc. will be retained to provide these services.

Geotechnical Solutions, Inc.

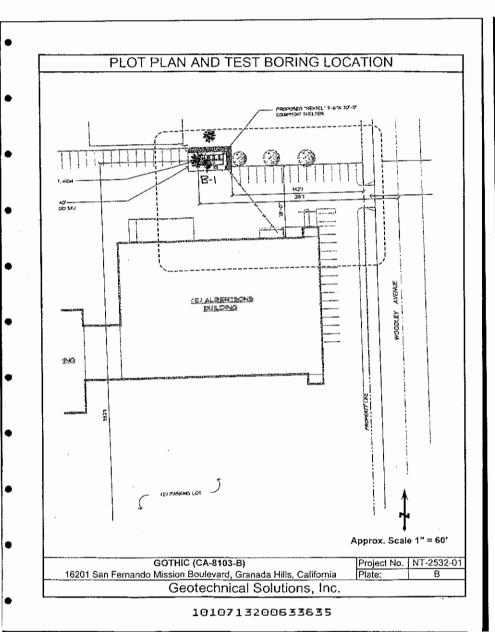
#### Appendix A

- Vicinity Map
- Plot Plan & Test Boring
- Log of Test Hole
- Direct Shear Test.
- Consolidation Tests
- Laboratory Testing

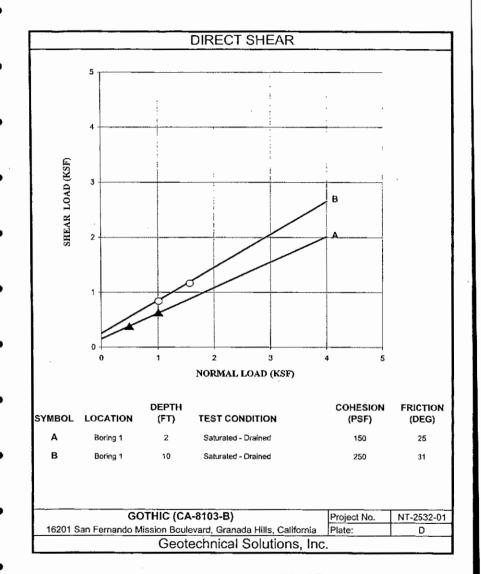


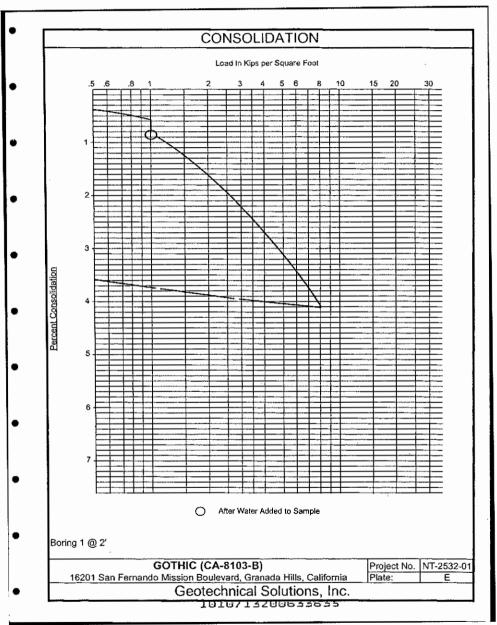
1010713200633635

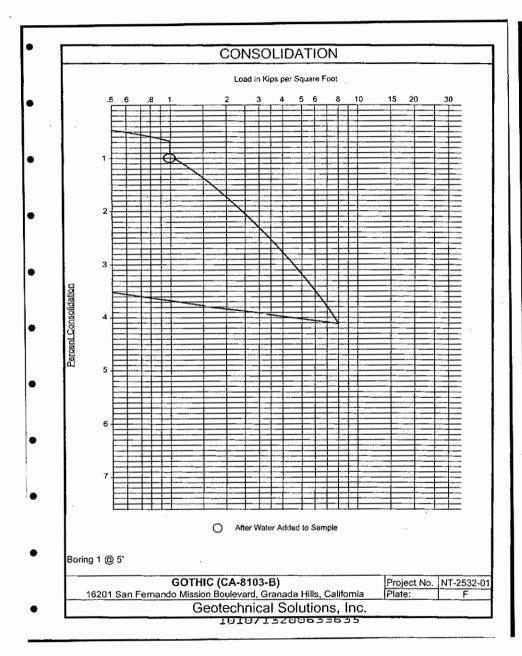
12

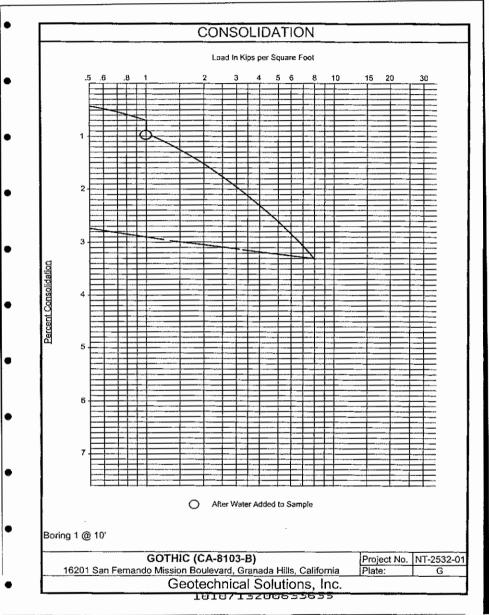


|                              | Log of Te   | st H   | ole l | Vo. | 1        |        |                |                   |
|------------------------------|---|--------|-------|-----|----------|--------|----------------|-------------------|
| Drilling I                   | Equipment: 8" Hollowstern Auger   |        |       | Dr  | lling    | Date:  | 3/4/2004       |                   |
| Drivin<br>Depth (ft) S I     | g Weight: 140 lbs. @ 30" Drop<br>Bl Description   | I N    |       | W   | '''-11 A | LHANAT |                |                   |
| Jepin (ii) Sit               | Asphalt   | N      | D     | ٧٧  | #4       | #200   | C              | F                 |
| 2 -                          | Alluvium<br>SILTY SAND, moist, fine grained   | 24     | 108   | 10  |          |        | brown          | medium            |
| 5 — <b>**</b>                | 0   | ١.,    |       | 45  |          |        |                | dense             |
| 5 — <b>33</b><br>-<br>-<br>- | Same  | 19     | 107   | 15  |          |        | light<br>brown | loose ·           |
| 10 -                         | Same  | 46     | 119   | 9   |          |        |                | medium<br>dense   |
| 15 -                         | SILTY CLAY w/spme sand, very<br>moist, fine grained, low to medium<br>plasticity              | 28     | 105   | 25  |          |        | light<br>brown | stiff             |
| 20                           | SAND w/gravel, moist, coarse grained  | 58     | -     | 10  |          |        | brown          | very<br>dense     |
| 25*                          | some pebbles  | 100    | -     | 7   |          |        |                |                   |
| 30 - *                       | SANDY CLAY w/gravel, moist low plasticity   | 31     | -     | 18  |          |        |                | hard              |
| 35*                          | SILTY SAND w/gravel, some clay  | 34     | -     | 13  |          |        |                | dense             |
| -                            | End of boring @ 36.5-ft. No Groundwater. No caving  |        |       |     |          |        |                |                   |
| N D W                        | SPT Core Sample B Bulk S Number of Blows #4 % Pa Dry Density #200 % Pa Field Moisture Content | ssing  | Sieve |     |          |        |                | Color<br>Firmness |
|                              | GOTHIC (CA-8103-E   | 3)     |       |     |          |        | Project No.    | NT-2532-0         |
| 40004                        | San Fernando Mission Boulevard, Gr  | -)<br> |       | Δ-1 |          | . 1    | Plate:         | C C               |









Project No NT-2532-01 Gothic (CA-8103-B) CALIFORNIA FAULT MAP Gothic (CA-8103-B); NT-2532-01; 1100 -1000 900 Appendix B 800 -- Seismic Data 700 -- UBCSEIS - Frisksp 600 -500 400 100 300 100 200 13 1010713200633635 1010713200633635 \* UBCSEIS \*
\* Version 1.03 \*

COMPUTATION OF 1997 UNIFORM BUILDING CODE SEISMIC DESIGN PARAMETERS

JOB NUMBER: NT-2532-01

DATE: 03-05-2004

JOB NAME: Gothic (CA-8103-B)

FAULT-DATA-FILE NAME: CDMGUBCR.DAT

SITE COORDINATES:

SITE LATITUDE: 34.2736 SITE LONGITUDE: 118.4856

UBC SEISMIC ZONE: 0.4

UBC SOIL PROFILE TYPE: SD

NEAREST TYPE A FAULT:

NAME: SAN ANDREAS - 1857 Rupture

DISTANCE: 42.4 km

NEAREST TYPE B FAULT:

NAME: SIERRA MADRE (San Fernando)

DISTANCE: 3.3 km

SELECTED UBC SEISMIC COEFFICIENTS:

Na: 1,2

Nv: 1.4 Ca: 0.51

Cv: 0.91

Ts: 0.707

To: 0.141

\* CAUTION: The digitized data points used to model faults are limited in number and have been digitized from small-scale maps (e.g., 1:750,000 scale). Consequently, the estimated fault-site-distances may be in error by several kilometers. Therefore, it is important that the distances be carefully checked for accuracy and adjusted as needed, before they are used in design.

SUMMARY OF FAULT PARAMETERS

Gothic, Page 2

| FAULT NAME  | I (km)                                       | L(A.B.C)    | (Mw)                  | SLIP<br>  RATE<br>  (mm/yr)  | LICE DC DTL    |
|---|--|-------------|-----------------------|--|----------------|
| SIFDER MADDE /Com Formandot   |  |             |                       |  |                |
| SANTA SUSANA  | 5.2  | B           | 6.6                   | 2.00<br>  5.00<br>  0.50<br>  1.00<br>  1.00<br> | l DS           |
| VERDUGO   | 1 6.1  | I B         | 6.7                   | 0.50   | DS             |
| SAN GABRIEL   | 12.4   | J B         | 7.0                   | 1.00   | SS             |
| HOLSER  | [ 13.9                                       | I B         | 6.5                   | I 0.40   | DS             |
| SIERRA MADRE (Central)  | 1 17.4                                       | I B         | 7.0                   | I 3.00   | 1 DS           |
| HOLLYWOOD   | 1 18.4                                       | B           | 6.5                   | 1.00   | I DS           |
| SANTA MONICA  | 1 19.9                                       | B           | 6.6                   | 1.00   | I DS           |
| OAK RIDGE (Onshore)   | 1 24.1                                       | l B         | 6.9                   | 4.00   | I DS           |
| MALIBU COAST  | 1 24.7                                       | l B         | 6.7                   | 0.30   | ! DS           |
| RAYMOND   | 1 27.8                                       | i B         | 6.5                   | 0.50   | DS             |
| SIMI-SANTA ROSA   | 2B.8   | 1 B         | 6.7                   | 1.00   | l DS           |
| NEWPORT-INGLEWOOD (L.A.Basin)   | 28.8   | l B         | 6.9                   | 1.00   | SS             |
| SAN CAYETANO  | 31.2   | I B         | 6.8                   | 1 6.0D   | l DS           |
| ANACAPA-DUME<br>PALOS VERDES<br>CLAMSHELL-SAWPIT  | 32.3   | i B         | 7.3                   | 3.00   | i DS           |
| PALOS VERDES  | 34.2   | I B         | 7.1                   | 3.00   | l SS           |
| CLAMSHELL-SAWPIT  | 39.1   | I B         | 6.5                   | 0.50   | l DS           |
| SAN ANDREAS - 1857 Rupture  | 42.4   | A           | 1 7.B                 | 34.00  | l ss           |
| SANTA YNEZ (East)   | 50.4   | В           | 7.0                   | 2.00   | I SS           |
| SANTA YNEZ (East)<br>ELSINORE-WHITTIER  | 1 53.6                                       | В           | 6.8                   | 2.50   | l SS           |
| SAN JOSE  | 59.3   | B           | 6.5                   | 0.50   | l DS           |
| VENTURA - PITAS POINT   | 60.8   | В           | 6.8                   | 1.00   | l ns           |
| CUCAMONGA   | 65.7   | A           | 7.0                   | 5.00   | DS             |
| M.RIDGE-ARROYO PARIDA-SANTA ANA   | 66.2   | В           | 6.7                   | 5.00<br>0.40   | DS             |
| M.RIDGE-ARROYO PARIDA-SANTA ANA<br>CHING-CENTRAL AVE. (Elsinore)<br>GARLOCK (West)<br>PLEITO THRUST   | 70.6   | В           | 6.7                   | 1.00   | l DS           |
| GARLOCK (West)  | 71.9   | A           | 7.1                   | 6.00   | ss .           |
| PLEITO THRUST   | 72.9   | В           | 6.8                   | 2.00   | l DS           |
| RED MOUNTAIN  | 74.4   | B           | I 6.8                 | 2-00   | DS             |
| BIG PINE  | 77.4   | B           | 6.7                   | 0.80   | l SS           |
| SAN ANDREAS - Southern  | 88.2   | A           | 7.4                   | 24.00  | ss             |
| SAN JACINTO-SAN BERNARDING  | 89.9   | В           | 6.7                   | 12.00  | SS             |
| ELSINORE-GLEN IVY   | 90.9   | В           | 6.8                   | 5.00   | SS             |
| NEWPORT-INGLEWOOD (Offshore)  | 92.3   | В           | 6.9                   | 1.00<br>6.00<br>2.00<br>2.00<br>0.80<br>24.00<br>12.00<br>15.00<br>1.50  | . SS           |
| CLEGHORN  | 93.9   | В           | 6.5                   | 3.00   | 55             |
| WRITE WOLF  | 99.0   | в.          | 72                    | 2.00   | l DS           |
| SANTA CRUZ ISLAND   | 1 99.8                                       | В           | 6.8                   | 1.00   | l DS           |
| SANTA YNEZ (West)   | 1 308.0 (                                    | В           | 6.9                   | 2.00   | 1 66           |
| NORTH FRONTAL FAULT ZONE (West)   | 1 110.7                                      | В           | 701                   | 1.00   | . 33           |
| SAN JACINTO-SAN JACINTO VALLEY  | 1 118.2                                      | B           | 691                   | 12.00  | 1 23           |
| HELENDALE - S, LOCKHARDT  | 1 320.0                                      | 8 :         | 7 7 1                 | 0.60   |                |
| GARLOCK (East)  | 1 100 3                                      | n           | 731                   | 7 00 1   | e e            |
|   | 1 120-3 1                                    |             |                       |  |                |
| CORONADO BANK   | 1 120.3                                      | В           | 7.4                   | 3.00   | 55             |
| CORONADO BANK<br>LENWOOD-LOCKHART-OLD WOMAN SPRGS   | 1 123.0                                      | B           | 7.4                   | 3.00   | SS             |
| CORONADO BANK<br>LENWOOD-LOCKHART-OLD WOMAN SPRGS<br>ELSINORE-TEMECULA  | 120.3  <br>  123.0  <br>  124.4              | B           | 7.4   7.3   6.8       | 3.00  <br>0.60   | SS<br>SS       |
| NEWPORT-INGLEWOOD (Offshore) CLEGHORN WHITE WOLF SANTA CRUZ ISLAND SANTA YNEZ (West) NORTH FRONTAL FAULT ZONE (West) SAN JACINTO-SAN JACINTO VALLEY HELENDALE - S. LOCKHARDT GARLOCK (East) CORONADO BANK LEWWOOD-LOCKHART-OLD WOMAN SPRGS ELSINORE-TEMECULA SANTA ROSA ISLAND GRAVEL HILLS - HARPER LAKE | 120.3  <br>  123.0  <br>  124.4  <br>  125.9 | B<br>B<br>B | 7.4   7.3   6.8   6.9 | 3.00  <br>0.60  <br>5.00   | SS<br>SS<br>SS |

#### SUMMARY OF FAULT PARAMETERS

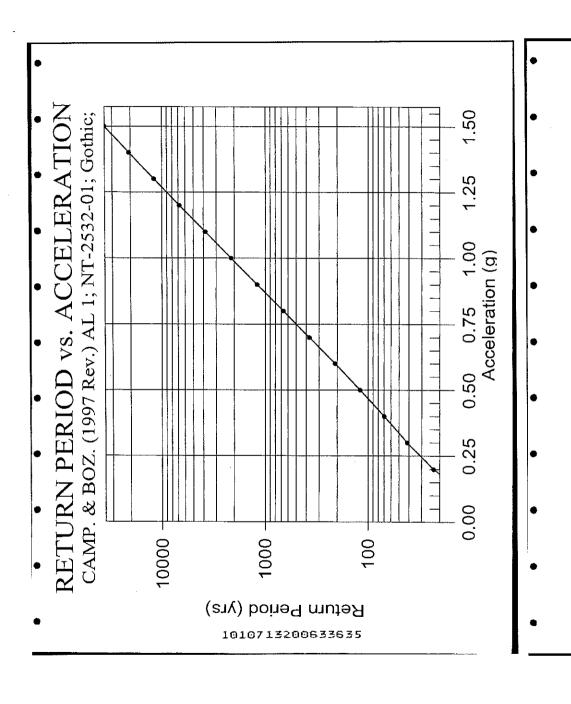
Gothic, Page 3

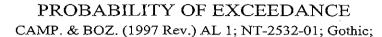
|   |         |      |       | SLIP<br>RATE | FAULT        |
|---|---------|------|-------|--------------|--------------|
| FAULT NAME  |         |      |       |              | (SS,DS,BT)   |
| CAULT NAME  |         |      |       |              |              |
|   |         |      |       |              |              |
| SO. SIERRA NEVADA<br>LOS ALAMOS-W. BASELINE<br>NORTH FRONTAL FAULT ZONE (East)  | 1 150 4 | В    | 6.8   | 0.70         | l DS         |
| JOSTH PROMENT PROME (Fact)  | 1 154 2 | B    | 6.7   | 0.50         | DS           |
| ENN TACTATO ANTA  | 1 155 0 |      | 7 2   | 1 12 00      |              |
| DI DOMINTED   | 1 157 6 |      | 1 6 9 | 1 0 60       | 1 00         |
| DOSE CRNYON   | 1 160 2 | 1 12 | 6 9   | 1 3.50       | . 55         |
| ANDERS  | 1 161 3 |      | 1 7 3 | 1 0 60       | , 55         |
| DINTO MOINTAIN  | 1 163 8 |      | 7.0   | 2.50         | 1 20         |
| CALTCO - HIDALCO  | 1 164 6 | 1 12 | 7.3   | 0.60         | . 55         |
| CAN TUAN  | 1 166 P | , ,  | 7.1   | 1 1 00       |              |
| TOME E TAKE   | 1 167 1 | 1 10 | 6.7   | 0.70         | 1 55         |
| TONE HEAD   | 1 167 5 | 1 5  | 6.6   | 0.70         | ) 55<br>) 55 |
| TONICON WATTER (NAME)   | 1 167.5 | 1 5  | 6.0   | 0.02         | 1 03         |
| DISTRODE TO TAK   | 1 701.0 | 1 3  | 3 1   | 5 00         | 1 55         |
| ELSINORE-SULIAN   | 1 177 2 |      | 7.1.  | 1 0.00       | 1 55         |
| SAN LUIS KANGE (S. MATGIN)  | 1 101 2 | 1 5  | 1 6 0 | 0.20         | 1 05         |
| CACHALLA (CONNET FRANCE) FRANCE   | 1 101.2 |      | 0.3   | 0.00         | 1 22         |
| DASMALIA (OFCUEE FFOREST FAULE)   | 1 100.3 |      | 0.5   | 1 0.23       | 1 05         |
| TANK CANION   | 103.7   | . 5  | 0.5   | 1 0 60       | ( 100        |
| BURNI MIN.  | 1 102 0 | 1 P  | 0.5   | 0.60         | 1 55         |
| DICCEN PULLTON MON MECONTER IV  | 102.5   | , ,  | 0.3   | 0.60         | 1 22         |
| FISGAR-BULDION MINMESQUITE EX   | 193.3   |      | 1 6 0 | 0.60         | 33           |
| LOS USOS  | 201.6   |      | 0.0   | 1 0.50       | 1 05         |
| SAN SACINIO-COIDIE CREEK  | 205.1   |      | 1 7 2 | 1 2 50       | 33           |
| PANAPINI VALLEI   | 200.3   |      |       | 2.30         | 1 55         |
| CAT THE   | 1 213 0 | 1 10 | 6.5   | 1 2.00       | 1 60         |
| HOGGET  | 1 213.0 | , B  | 7 3   | 2.00         | 1 66         |
| OMENG ANTIES  | 1 218 0 |      | 7.5   | 2.50         | 1 80         |
| DINCONDO  | 210.0   |      | 7.3   | 1.30         | 1 66         |
| DEATH VALLEY (South)  | 1 240 8 |      | ( 6 0 | 4.00         | 1 66         |
| CAN JACTUTO - BODDECO   | 240.5   |      | 1 6 6 | 4.00         | 1 66         |
| ELCINODE COVOTE MOUNTAIN  | 243.4   |      | 1 6 0 | 4.00         | 1 00         |
| INDEPENDENCE ROOKIMIN   | 1 250 4 |      | 0.0   | 1 9.00       | 1 00         |
| DENTH WALLEY (Graber)   | 250.4   | 1 1  | 1 6 9 | 1 4.00       | 1 06         |
| UNMED WANT - DATTHE WATTER  | 1 263 1 |      | 7.0   | 1 3.00       | 1 55         |
| CAN ANDDERS (Crasping)  | 1 270 7 | 1 1  | 5.0   | 1 24 00      | 1 55         |
| CHEERSTITION MIN (Creeping)   | 1 275 3 | 1 10 | 5.0   | 1 5 00       | 1 00         |
| DONALEY CRICATO TONE  | 275.3   |      |       | 1 25 00      | 1 55         |
| PRAWLEI SEISMIC ZONE  | 1 279 5 | B B  | 0.5   | 1 25.00      | 1 55         |
| CHOPDOTITION UTILS (Cam Tanintal  | 1 200 0 |      | 1 6 6 | 1 4.00       | 1 55         |
| DEBTH VALLEY (Northern)   | 1 200.0 | , b  | 7 2   | 1 5.00       | 1 22         |
| DEATH VANDEL (NOTCHERN)   | 1 201 0 | , A  | 7.2   | 3.00         | 50           |
| PT9TMOVE_TWOOLW 2MTWOW  | 234.8   |      | 1 7.0 | , 3.50       | 55           |
| DIDCU CDREV   |         |      |       |              |              |
| BIRCH CREEK   | 1 300.6 |      | 7.0   | 20.00        | 1 56         |
| SO. SIERRA NEVADA LOS ALAMOS-W. BASELINE NORTH FRONTAL FAULT ZONE (East) SAN JACINTO-ANZA BLACKWATER ROSE CANYON LANDERS PINTO MOUNTAIN CALICO - HIDALGO SAN JUAN LITTLE LAKE LIONS HEAD JOHNSON VALLEY (Northern) ELSINORE-JULIAN SAN LUIS RANGE (S. Margin) CHESINORE-JULIAN SAN LUIS RANGE (S. Margin) EMERSON SO COPPER MTN. CASMALIA (Orcutt Frontal Fault) TANK CANYON BURNT MTN. EUREKA PEAK PISGAM-BULLION MTNMESQUITE LK LOS OSOS SAN JACINTO-COYOTE CREEK PANAMINT VALLEY ONU. LAKE EARTHQUAKE VALLEY HOSGRI OMENS VALLEY RINCONADA DEATH VALLEY (South) SAN JACINTO - BORREGO ELSINORE-COYOTE MOUNTAIN INDEPENDENCE DEATH VALLEY (Graben) HUNTER MTN SALINE VALLEY SAN ANDREAS (Creeping) SUPERSTITION MTN. (San Jacinto) BRAWLEY SEISMIC ZONE ELMORE RANCH SUPERSTITION HILLS (San Jacinto) DEATH VALLEY (Northern) ELSINORE-LAGUNA SALADA BIRCH CREEK IMPERIAL WALLEY MOUNTAINS ROUND VALLEY (E. of S.N.Mtns.) | 1 307.5 | I A  | 7.0   | 20.00        | 55           |

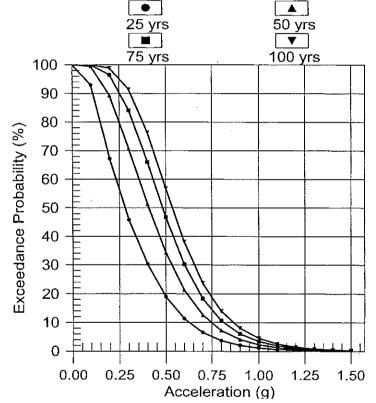
# SUMMARY OF FAULT PARAMETERS

#### Gothic, Page 4

| ABBREVIATED   | APPROX.       | SOURCE  | MAX.  | SLIP    | FAULT     |
|---|---------------|---|-------|---------|-----------|
| ABBREVIATED   | DISTANCE (km) | TYPE  | MAG.  | RATE    | TYPE      |
| ABBREVIATED FAULT NAME  DEEP SPRINGS FISH SLOUGH DEATH VALLEY (N. of Cucamongo) OKTIGALITA HILTON CREK CALAVERAS (So. of Calaveras Res) MONTEREY BAY - TULARCITOS PALO COLORADO - SUR QUIEN SABE HARTLEY SPRINGS ZAYANTE-VERGELES SARGENT SAN ANDREAS (1906) MONO LAKE SAN GREGORIO ROBINSON CREEK GREENVILLE MONTE VISTA - SHANNON HAYWARD (SE Extension) CALAVERAS (No. of Calaveras Res) HAYWARD (Total Length) ANTELOPE VALLEY GENOA CONCORD - GREEN VALLEY RODGERS CREEK WEST NAPA POINT REYES HUNTING CREEK, - BERRYESSA MARCAMA (South) COLLAYOMI BARTLETT SPRINGS HAACAMA (Central) MAACAMA (Central) MACAMA (North) ROUND VALLEY (N. S.F.Bay) BATTLE CREEK LAKE MOUNTAIN GREENVILLE-BRICELAND MENDOCINO FAULT ZONE LITTLE SALMON (Onshore) MAD RIVER CASCADIA SUBDUCTION ZONE MCKINLEYVILLE TRINIDAD FICKLE HILL TABLE BLUFF LITTLE SALMON (Offshore) BIG LAGOON - BALD MTN.FLT.ZONE | (KM)          | (A,B,C)                                       | (MW)  | (mm/Yr) | (SS,DS,BT |
| DEEP SPRINGS  | 331.1         | B   | 6.6   | 0.80    | DS        |
| FISH SLOUGH   | 343.2         | i B   | 6.6   | 0.20    | DS        |
| DEATH VALLEY (N. of Cucamongo)  | 346.2         | A   | 7.0   | 5.00    | i ss      |
| ORTIGALITA  | 354.7         | В   | 6.9   | 1.00    | ss        |
| HILTON CREEK  | 355.2         | В   | 6.7   | 2.50    | l DS      |
| CALAVERAS (So.of Calaveras Res)   | 360.0         | В   | 6.2   | 15.D0   | l ss      |
| MONTEREY BAY - TULARCITOS   | 363.7         | i B   | 7.1   | 0.50    | l DS      |
| PALO COLORADO - SUR   | 366.3         | ı B   | 7.0   | 3.00    | i ss      |
| QUIEN SABE  | 373.1         | B   | 6.5   | 1.00    | i ss      |
| HARTLEY SPRINGS   | 1 376.5       | B B   | 6.6   | 0.50    | DS        |
| ZAYANTE-VERGELES  | 1 391.6       | i B   | 6.8   | 0.10    |           |
| SARGENT   | 1 396.8       | B   | 6.8   | 3.00    | SS        |
| SAN ANDREAS (1906)  | 396.8         | . <u>-</u>                                    | 7.9   | 24.00   | l SS      |
| MONO LAKE   | 1 411.0       | B   | 6.6   | 2.50    | i ns      |
| SAN GREGORIO  | 1 438.5       | A   | 7.3   | 5.00    | 55        |
| ROBINSON CREEK  | 1 441.1       | ı P   | 6.5   | 0.50    | i ns      |
| GREENVILLE  | 446.6         | ı B   | 6.9   | 2 00    | 1 88      |
| MONTE VISTA - SHANNON   | 1 446.7       | . B   | 6.5   | 0.40    | l DS      |
| HAYWARD (SE Extension)  | 1 446 7       | B   | 6.5   | 3 00    |           |
| CALAVERAS (No. of Calaveras Res)  | 466 4         | B   | 6.8   | 5.00    | . 55      |
| HAYWARD (Total Length)  | 466.4         | 1 1   | 7 1   | 9.00    | , 33      |
| ANTELOPE VALLEY   | 1 479 8       | 1 2   | 6.7   | 0.80    | 1 00      |
| GENOA   | 1 502 7       | B   | 6.9   | 1 1 00  | l DS      |
| CONCORD - GREEN VALLEY  | 514 1         | 1 2   | 6 9   | 6.00    | 1 66      |
| BOUCERS CREEK   | 552.5         | , <u>, , , , , , , , , , , , , , , , , , </u> | 7.0   | 0.00    | 1 55      |
| WEST WAPA   | 553.6         | 1 12  | 6.5   | 1 3.00  | 1 66      |
| POINT REYES '   | 571 7         | 1 2   | 6.0   | 0.70    | 1 00      |
| HUNTING CREEK - BERRYESSA   | 576.5         |   | 6.0   | 6.00    |           |
| MARCAMA (South)   | 615.1         | 1 5   | 6.5   | 0.00    | 1 55      |
| COLLAYOMI   | 632.2         | 1 1   | 6.5   | 1 0 60  | , 55      |
| BARTIETT SODINGS  | 1 636 3       | 1 7   | 7 7 1 | 6.00    | 1 55      |
| MARCAMA (Central)   | 1 656.4       | , ,   | 7.1   | 0.00    | 1 33      |
| MARCAMA (North)   | 1 715 0       | , ,   | 7 1   | 9.00    |           |
| DOUND VALLEY (N C F Bay)  | 1 713.3       | 1 2   | 6.0   | 5.00    | 1 55      |
| BETTE CEFFE   | 1 752.0       |   |       | 0.00    | 33        |
| TAVE MOUNTAIN   | 732.7         | , ,   | 6.3   | 0.50    | 1 05      |
| CARREDUTITE - BRICETAND   | 1 700.3       |   | 6.0   | 0.00    | 33        |
| MENDOCINO PAULT ZONE  | 1 757.4       | , ,   | 0.9   | 35.00   | 35        |
| TITTLE CALMON (Onchare)   | 1 052.5       | A   | 1 /-4 | 35.00   | l DS      |
| MAD BYUEB   | 1 800.7       | ( A   | 7.0   | 0.70    | 1 05      |
| CASCADIA CURRUCTION COM   | 1 863.6       | ( B   | /-1   | 0.70    | ເມຣ       |
| MAKINI BAALLI B   | 1 000.1       | , A   | 7.0   | 33.00   | 20        |
| TRINITAD  | 1 074.2       |   | 7.0   | 0.60    | DS DS     |
| IKINIDAD  | 1 8/5.9       | ы   | 7.3   | 2.50    | DS        |
| TABLE BILLER  | 1 876.0       | В   | 6.9   | 0.60    | DS        |
| ITTELS COLUMN (Officers)  | 1 680.8       | В   | 7.0   | 0.60    | DS .      |
| BIG ARCOON TALE MEN FIR COME  | 1 894.2       | 1 13  | 7.1   | 1.00    | DS DS     |
| #15 LAGUON - BALD MTN.FLT.ZONE  | 1 912.8       | В   | /.3   | 0.50    | D\$       |







Project No NT-2532-01 Gothic (CA-8103-B) Appendix C Field Resistivity Test 14

| Gorhic (CA-8103-B)                   | 01               |   |  |               |
|--------------------------------------|------------------|---|--|---------------|
|                                      | ` Te             | st Report                               |  |               |
| Site Name: Goth                      |                  | •                                       |  |               |
| Site Address: 16                     | 201 San Fernan   | do Mission Bou                          | levard, Granada Hills, Ca                  | lifornia.     |
| Report Prepared                      | by: Geotechnic   | al Solutions, In                        | .c.  |               |
| Give two or thre<br>Gray, moist, and |                  |   | oil as seen at the site:<br>grained Sands, |               |
| Soil Condition:                      | ☐ Wet            |   | □ Dry                                      |               |
| Choose one and conditions:           | only one of the  | following descri                        | ptions that best describe                  | the earth     |
|                                      | ☐ Goo            | d clay earth                            | ⊠Sandy                                     | soil soil     |
|                                      | □ Solic          | l rock                                  | ☐ High                                     | -Rise site    |
| If high-rise site v                  |                  |   | of the main water line en                  | tering the    |
| ☐ The line was                       | located and veri | ified as copper a                       | nd is inches in circu                      | mference.     |
| ☐ The line was                       | located and veri | ified as iron and                       | is inches in circumf                       | erence.       |
| ☐ I was unable<br>the groundin       |                  | ater main and rec                       | commend further engineer                   | ring study fo |
| Provide the follo                    | owing informati  | on:                                     |  |               |
| Date of Resistiv                     | ity test: 3/4/04 |   |  |               |
|                                      |                  | eding the test: Si<br>been clear and si | unny and moderately war                    | m             |
|                                      |                  |   |  |               |

1010713200633635

15

Project Name: Gothic (CA-8103-B)

Date: 3-4-04

Project No: NT-2532-01

Site Address: 16201 San Fernando Mission Boulevard, Granada Hills, California.

### RESISTIVITY DATA

|                       |                |                |        |        | ·      |
|-----------------------|----------------|----------------|--------|--------|--------|
| A= (ft)               | 5              | 10             | 20     | 30     | 40     |
| Formula =<br>(Ohm-cm) | 957.5*R        | 1915*R         | 3830*R | 5745*R | 7660*R |
| Area l<br>Measured R  | 3.0            | 1.0            | ·      |        |        |
| Area l<br>Calc        | 2871<br>Ohm-cm | 1915<br>Ohm-cm |        |        |        |
| Area 2<br>Measured R  |                |                |        |        |        |
| Area 2.<br>Calc       |                | -              |        |        |        |
| Area 3<br>Measured R  |                |                |        |        |        |
| Area 3<br>Calc        |                |                |        |        |        |
| Area 4<br>Measured R  |                |                |        |        |        |
| Area 4<br>Calc        |                |                |        |        |        |

Date of Calibration: 3/2003

Field Engineer: Mo

# FOUNDATION ENGINEERING CO., INC.



GEOTECHNICAL CONSULTANTS

18344 OXNARD STREET • TARZANA, CALIFORNIA 91356 LOS ANGELES (213) 873-5032 VALLEY (818) 996-1600

May 22, 1986

Mr. Forest McDowell F.M. Associates 121 W. Whittier Blvd., No. 33 La Habra, CA 90631

Update Soils Engineering Report Prop. Bldg. - Granada Hills Plaza 16201 San Fernando Mission Blvd. Granada Hills, California

Dear Mr. McDowell:

This letter constitutes an update to previous soil engineering studies performed at this site and is specifically prepared to address a now proposed building in the S.W. corner of the site. Reference is made to previously prepared reports, all by Foundation Engineering Co., Inc., as follows:

- 1) Soils Engineering Report, August 12, 1980
- 2) Report on Compacted Fill, March 25, 1981
- Supplemental Report on Compacted Fill, November 30, 1981 3)

It is understood that you will now construct a small one-story building (frame & stucco); the general location of the proposed project is indicated on the attached Location of Density Tests map (excerpted from our March 25, 1981 report). The structure is to be supported on conventional spread footings (continuous wall footings and isolated pad footings supporting roof loads and exterior overhangs); foundation loads are expected to be relatively light. Note (from the attached map) that the subject area was not graded during the 1981 site development.

The site is presently vacant and is surrounded by concrete curbs, sidewalks, and the A.C. paved parking lot of the shopping center. The ground surface is covered with small gravels & sand; an electrolier stands in about the middle of the proposed building area.

Mr. Forest McDowell

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16201 San Fernando Mission Blvd. Granada Hills, California

Recommendations that are pertinent to the now proposed project, excerpted from our original Soils Engineering Report (August 12, 1980), are as follows:

It is recommended that the proposed structures be supported on footings placed into firm natural soil or compacted fill.

Any existing fill and soils loosened during demolition should be removed. It may be replaced as compacted fill, as needed, as long as it is free of deleterious material and meets project material specification requirements. In addition, the existing soil in proposed building areas, and to 5 feet laterally beyond, should be removed to a depth of at least 1-1/2 feet below natural grades and be replaced as compacted fill.

After the site preparation (grading), continuous footings should be placed at a minimum depth of 12 inches below approved ground surface; 18 inches for isolated pads. minimum width of continuous footings should be 12 inches; isolated pads 24 inches.

Continuous footings having a depth of 12 inches and a width of 12 inches may be designed for a foundation pressure of 1500 pounds per square foot. An increase of 700 pounds per square foot for each additional foot of depth and an increase of 350 pounds per square foot for each additional foot of width may be used, but should not exceed 3000 pounds per square foot.

Isolated footings having a depth of 18 inches and a least lateral dimension of 24 inches may be designed for a foundation pressure of 2100 pounds per square foot. An increase of 700 pounds pe square foot for each additional foot of depth and an increase of 300 pounds per square foot for each additional foot of width may be used, but the foundation pressure should not exceed 3000 pounds per square foot.

The weight of the footing below the lowest adjacent grade can be neglected. The allowable foundation pressure may be increased up to 1/3 above the given value for earthquakes or other temporary forces.

Continuous footings should be reinforced with at least one No. 4 bar of steel near the top of the foundation wall and at least one No. 4 bar of steel near the bottom of the footing.

Mr. Forest McDowell

16201 San Fernando Mission Blvd. Granada Hills, California

Spread footings may be tied together with properly reinforced floor slabs. Reinforced floors resting on the on-site sands and gravelly sands may be used to resist horizontal forces with a coefficient of sliding of  $\emptyset.4$ . Horizontal forces may be resisted by the footings themselves with the sliding coefficient given above and a passive pressure on the side of the footing of 250 pounds per cubic foot, equivalent fluid pressure. The allowable forces may be increased by one-third for earthquakes and other temporary forces.

All grading should be in accordance with the approved plans and specifications. The soil engineer should be notified when clearing and demolition commence.

Footing excavations should be examined by Foundation Engineering Co., Inc. before the forms are set.

On completion of the work, the site should slope away from the building. Water should not be allowed to pond adjacent to the foundations.

Where fill or base is to be placed in parking areas to establish grades, existing subgrades should be deep ripped (8 to 10 inches), moistened to near optimum moisture and be compacted to an unyielding condition, prior to fill placement. Where cuts are to be performed in parking areas to establish grades, the subgrade exposed after the cut should be similarly deep ripped, moistened and compacted, before any base placement.

Footing trench spoils should not be cast and spread across slab areas without being compacted to the same compaction specifications as primary fill. Backfill returned to footing trench excavations to restore grades after the construction of footings, walls, columns, etc., should also be mechanically compacted to the same compaction requirements in order to minimize the potential for the edge cracking of slabs.

Unfortunately, our records indicate that the site preparation called for (removal & recompaction of 1 1/2'+ of upper natural soils) was never done in this area. Subsequently - in order to "dress" the area - approximately 6" to 1' of small gravel and sand was placed over the natural ground surface (atop the uncompacted surface soils). It is recommended therefore that 2 1/2 feet of soils be removed from the proposed building area and to 5' beyond - and be replaced as compacted fill. The project soil engineer should observe the exposed bottom area to verify that firm natural ground has been reached and that no

Mr. Forest McDowell

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16201 San Fernando Mission Blvd. Granada Hills, California

unexpected areas of old fill, loose soils, etc. are exposed. The soil engineer should then observe and test the soils as they are replaced as compacted fill. All fill should be compacted to at least 90% of its maximum density as determined in accordance with ASTM Test Method D-1557.

Upon completion of the recommended site grading, the structure may be designed and constructed in accordance with our original recommendations (previously reiterated).

It is our conclusion, based on this review and a recent site observation, that the site will be suitable for the proposed grading and construction described in this report, providing the design and construction are properly executed. Our recommendations are based on site conditions during our original explorations, laboratory tests, and experience with similar sites; and are in accordance with generally accepted procedures of soil mechanics and foundation engineering.

#### FOUNDATION ENGINEERING CO., INC.

TJH:dt

May 22, 1986

Attachments:

1 - Proposed Project Area map (Loc. of Density Tests)

Thomas

1 - Location of Test Hole Map)

2 - Legends for Logs ) (From 1980 Soils Engr. Rpt.)

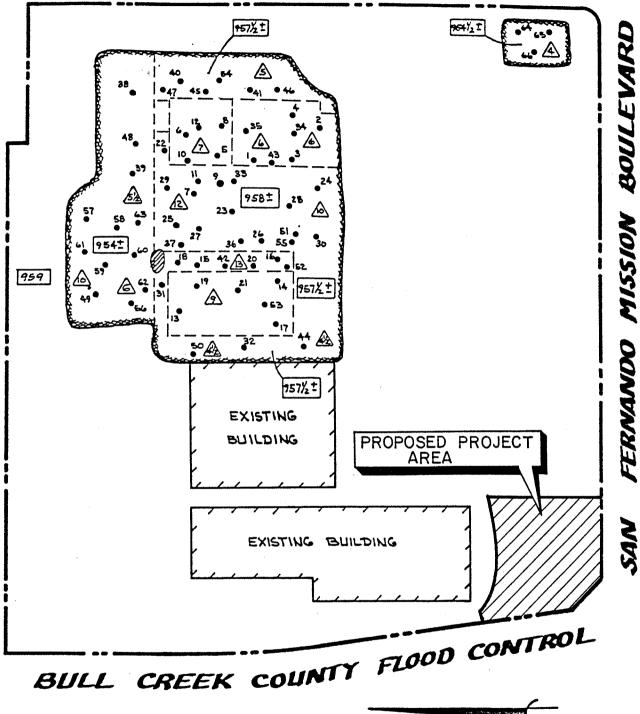
nqineer

2 pgs - Logs of Test Holes

# LOCATION OF DENSITY TESTS

WOODLEY

AVENUE



# LEGEND

LOCATION AND NUMBER OF DENSITY TEST

DEPTH OF FILL

are services of the services o LIMIT OF FILL

958± ELEVATION

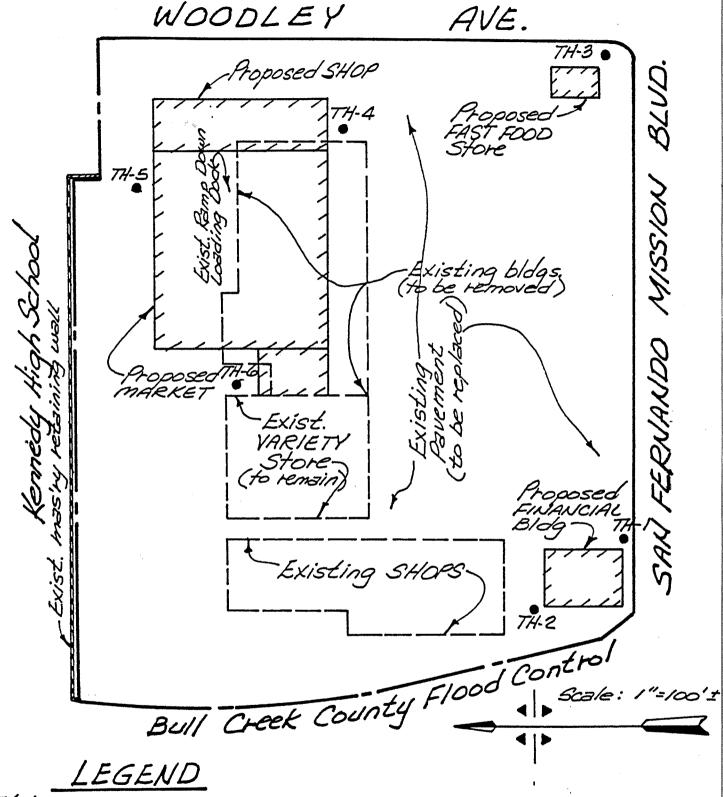
APPROX. AREA WHERE MANHOLE EXISTS (YET TO BE GRADED)

16201 SAN FERNANDO MISSION BLVD. GRANADA HILLS, CALIFORNIA

SCALE: 1" = 100 ±

ENGINEERING FOUNDATION COMPANY

# LOCATION OF TEST HOLES



TH-1 No. & location of test hole

> 16201 SAN FERNANDO MISSION GRANADA HILLS, CA BLUD.

## LOG OF TEST HOLES

The Log of Test Hole indicates the geotechnical conditions at that location at that particular time. Soil and groundwater conditions can change with time. The change in soil types may be transitional or abrupt.

Relatively undisturbed samples are usually obtained by a thin wall sampler in accordance with the American Society for Testing and Materials (ASTM) Test Method D 1587 "Thin-walled Tube Sampling of Soils." Samples are sometimes obtained by ASTM D 3550 "Ring-lined Barrel Sampling of Soils." These samples are sealed and delivered to the laboratory for testing.

Numerous samples are selected primarily for classification tests. These samples are obtained in accordance with ASTM D 1412 "Soil Investigation and Sampling by Auger Borings." In some cases samples are obtained by ASTM Method D 1587 "Penetration Test and Split-Barrel Sampling of Soils. The soil is classified in the field by the engineer that prepares the report in accordance with ASTM D 2488 "Description of Soils (Visual-Manual Procedure)". While at the site the engineer obtains other relevant information in general accordance with ASTM D-420 "Investigating and Sampling Soil and Rock for Engineering Purposes."

Classification tests are made in the laboratory on both undisturbed samples and disturbed samples in accordance with ASTM D 2487 "Classification of Soils for Engineering Purposes" and ASTM 2488. Only a broad classification of soils is given on the logs because the soils are variable. Therefore, the group symbol is not used. Fine grained soil is differentiated on the basis of ASTM D 2488. The logs are intended to portray easily identifiable changes in strata. When two soils are used as a soil classification, the last named is the predominate soil and the preceding soil type is the second most predominate soil. The shaded symbols are standard symbols and are not intended to indicate relative importance of soil components.

An explanation of the symbols and values shown on the logs are as follows:

- w Moisture content, percent of Dry Density
- Dry Density, pounds per cubic foot.
- The percent of the material that will pass a no. 4 sieve (3/16".) The materials larger than the no. 4 sieve and smaller than 3 inches would be designated as a gravel, and the material smaller than the no. 4 and larger than the no. 200 would be termed a sand.
- The percent of the material that will pass a no. 200 sieve (about the smallest that can be seen with the unaided eye.) The fraction finer than the 200 sieve are classed as a clay or silt.

C D.,

## STANDARD PENETROMETER

The standard penetrometer is used to provide a measure of the consistency of soil and to approximate the strength properties. With knowledge of the soil classification and penetration resistance, estimates of performance of the soil under influence of loads can be made. The oldest form of penetrometer testing, and the one most widely used, is called the "standard penetration test". This is performed in accordance with American Society for Testing and Materials (ASTM) test method D1586. It is performed by noting the number of blows (N) of a 140 lb. hammer falling 30 inches on a 2 inch (O.D.) sampler necessary to drive the sampler 12 inches, after seating the sampler 6 inches.

Gibbs & Holtz (1957) established that overburden pressure affected the blow count in cohesionless soils when tests were made in holes slightly larger than the penetrometer. Where penetrometer tests are made in the bottom of a test pit the values for zero depth should be used. Where penetrometer tests are made in a bucket auger hole a value between 0 and 15 feet should be used.

The following general relationships exist:

| COHESIONLESS SOIL |     |          |                     |          |    |       |
|-------------------|-----|----------|---------------------|----------|----|-------|
| Consistency       |     | De       | Relative<br>Density | <u>ø</u> |    |       |
|                   | 0'  | 15'      | י03                 | 60'      |    |       |
|                   | Per | netratio | n Resi              | stance N |    |       |
| Loose             | . 3 | 4        | 6                   | 10       | 35 | 28-38 |
| Medium Dense      | 6   | 12       | 20                  | 30       | 65 | 30-42 |
| Dense             | 12  | 24       | 30                  | 50       | 85 | 32-45 |
| Very Dense        |     |          |                     |          |    |       |
| COHESIVE SOIL     |     |          |                     |          |    |       |

Overburden does not significantly affect the penetration resistance according to Terzaghi (1948).

| Consistency  | 7  | Unconfined Compression |
|--------------|----|------------------------|
|              |    | T/SF                   |
| Soft         | 4  | 0.5                    |
| Medium Stiff | 8  | 1.0                    |
| Stiff        | •  |                        |
| Very Stiff   | 15 | 2.0                    |

C D.,

# TYPICAL LOG OF TEST HOLE

| <u>ד</u>    | H-1,2,4,6   | 7            | w                   | 87      | 4         | 2∞               | DESCRIPTION   |
|-------------|-------------|--------------|---------------------|---------|-----------|------------------|---|
| හ'±         |             | 2-3          | 10<br>-TEST<br>9-12 | HOLE 98 | 100<br>#( | 42<br>20<br>4045 | SILTY FINE SANDS Dark brown to brown below 3'± Moist, medium dense Minor small gravel No cobble or boulder  Sugary Gradual gradation change Grades darker brown, siltier  FINE SANDY SILTS Brown, moist, firm |
| 8.1         |             | 3-7          | 10-14               | 111-1Ko | . 100     | 50-70            | Medium dense Minor small gravel No cobble or boulders   |
|             |             | 5-8          | 13-16               | 115     | 100       | 50-70            |   |
| <b>25</b> ¹ | β<br>7<br>7 | 7-13<br>EXCA | 14-17               | 15      | 100       | 60- <b>V</b> 5   | NOTE: Values shown are limits of laboratory results  Depths of Test Holes  TH 1 - 15' TH 2 - 20' TH 4 - 35' TH 6 - 20'  |

IG201 SAN FERNANDO MISSION BLI GRANADA HILLS, CA

# TYPICAL LOG OF TEST HOLE

|      |            | N   | iv-  | ۶٦   | 4        | 200 | DESCRIPTION           |
|------|------------|-----|------|------|----------|-----|-----------------------|
| 25'  | TH-1,2,4,6 |     |      |      |          |     |                       |
|      |            |     |      |      |          |     |                       |
|      |            |     |      |      |          |     |                       |
|      |            |     | ,    |      |          |     | ·                     |
|      |            | 8   | 20   |      | 100      | 83  |                       |
|      |            |     |      |      |          |     |                       |
|      |            | ļ.  |      |      |          |     |                       |
|      |            | 1 . |      |      |          |     |                       |
| 28'± |            |     | ·    |      |          |     | Grades Sandier        |
| 4.5  |            | 12  | 15   |      | 100      | 45  | SILTY FINE SANDS      |
|      |            |     |      | 1    |          |     | Brown, moist          |
|      |            |     |      |      |          |     | Medium dense to dense |
|      |            |     |      |      |          |     | Coarser w/depth       |
|      |            |     |      |      |          |     | Medium grain size     |
| 251  |            | 30  | 12   |      | 100      | 33  | Some gravel w/depth   |
| 35   |            | EXC | VATI | ED 7 | - 10 - E | 30- |                       |

IG201 SAN FERNANDOMISSION BLA GRANADA HILLS, CA

# APPENDIX E GREENHOUSE GASES REPORT

# GREENHOUSE GAS IMPACT ANALYSIS

#### FOR THE

# WOODLEY & SAN FERNANDO MISSION MIXED-USE PROJECT

#### Prepared for:

EcoTierra Consulting 555 W 5th Street, 31st Floor Los Angeles, CA 90013

Prepared by:

Cadence Environmental Consultants
Camarillo, CA 93010
805-504-2140



August 2016

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# GREENHOUSE GAS IMPACT ANALYSIS

#### **FOR**

# LA VERANDA

#### INTRODUCTION

This Greenhouse Gas Impact Analysis has been prepared to evaluate the potential greenhouse gas (GHG) impacts associated with the proposed La Veranda mixed-use project. The purpose of this analysis is to identify the construction-related and operational GHG emissions that would be generated by the proposed project and compare these with established standards, including the thresholds of significance recommended by the South Coast Air Quality Management District (SCAQMD). This analysis also evaluates the consistency of the proposed project with the applicable policies that have been adopted to reduce state-wide GHG emissions.

There are several unique challenges to analyzing greenhouse gas emissions and climate change under the California Environmental Quality Act (CEQA), largely because of climate change's "global" nature. Typical CEQA analyses address local actions that have local – or, at most, regional – impacts, whereas climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential, if any, for global environmental impacts. Most environmental analyses examine the "project-specific" impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects is substantial, the contribution of an individual general development project is so small that direct project-specific significant impacts (albeit not cumulative significant impacts) are highly unlikely.

Global climate change is also fundamentally different from other types of air quality impact analyses under CEQA in which the impacts are all measured within, and are linked to, a discrete region or area. Instead, a global climate change analysis must be considered on a global level, rather than the typical local or regional setting, and requires consideration of not only emissions from the project under consideration, but also the extent of the displacement, translocation, and redistribution of emissions. In the usual context, where air quality is linked to a particular location or area, it is appropriate to consider the creation of new emissions in that specific area to be an environmental impact whether or not the emissions are truly "new" emissions to the overall globe. When the impact is a global one, however, it makes more sense to consider whether the emissions really are new emissions, or are merely being moved from one place to another. For example, the approval of a new developmental plan or project does not necessarily create new automobile drivers - the primary source of a land use project's emissions. Rather, due to the "relocation" factor, new land use projects sometimes merely redistribute existing

mobile emissions;<sup>1</sup> accordingly, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of the development project on global warming. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the "addition" of redistributed emissions to a new locale can make a substantial difference to overall air quality.

This Greenhouse Gas Impact Analysis will be used to support the Mitigated Negative Declaration that is prepared for the proposed project.

#### **SUMMARY**

The proposed project would generate greenhouse gas emissions, but would not exceed the draft thresholds of significance being considered by the SCAQMD.

The proposed project would generate greenhouse gas emissions, but would be consistent with applicable plans to reduce greenhouse gas emissions in California.

#### PROJECT DESCRIPTION

The proposed project site is located at 11147 N. Woodley Avenue and 16201–16301 W. San Fernando Mission Boulevard in the Granada Hills-Knollwood community of the City of Los Angeles. The site is largely bounded by Woodley Avenue on the east, San Fernando Mission Boulevard on the south, the Bull Creek storm channel on the west, and sports fields associated with John F. Kennedy High Schools to the north. A parcel containing a Taco Bell restaurant at the northwestern corner of Woodley Avenue and San Fernando Mission Boulevard is not part of the project site. Single family residences are located further to the east, south, and west of the site across the roadway and storm channel.

The project site is approximately 7.95 acres (346,245 square feet) in area and is currently developed with a 75,391 square-foot commercial center consisting of three buildings which include a 35,000-square-foot DMV office, 6,200 square feet of medical office, 12,410 square feet of restaurants (10,000-square-foot

<sup>&</sup>lt;sup>1</sup> For example, a subdivision of 500 homes generates 5,000 new trips per day and those trips would be added to the local streets and intersections. In the case of climate change, the trips that are associated with those same 500 homes presumably would emit roughly the same volume of GHGs in the City of Los Angeles as they would if they were traveling the same number of miles in Cleveland, Ohio. As a result, while raw vehicle trip counts occurring within a project area will accurately predict changes in congestion at intersections, the same certainty cannot be provided for climate change. The trips would certainly increase the number of vehicles passing through local intersections, but they will not increase the amount of GHG emissions into the world's atmosphere if those trips simply have been relocated from another location on the planet.

Chuck E Cheese, 1,050-square-foot Golden Wall Chinese, and 1,360-square-foot House of Grill), a 1,250-square-foot fast food restaurant without drive through (Mighty Mouth Burgers), 19,257 square feet of retail, and 1,274 square feet of space used for religious services. The site also includes surface parking and a batting cages facility. The existing commercial center has two driveways on San Fernando Mission Boulevard and two driveways on Woodley Avenue. Paved asphalt parking lots are located in the northeastern, eastern, and southern portion of the project site.

The project site has a General Plan land use designation of Community Commercial and is zoned C1-1VL (Limited Commercial – Height District 1VL). It is also designated as Commercial in the Granada Hills-Knollwood Community Plan.

The proposed project involves the proposed demolition of the existing uses at the site and the construction of three new buildings providing 440 residential units and approximately 64,650 square feet of commercial retail space. The retail uses would be located along the Woodley Avenue street frontage, with a proposed grocery store oriented along the San Fernando Mission Boulevard frontage. The proposed housing units would be located with two levels over the retail along Woodley Avenue, three levels over the grocery store, and four levels over a parking garage at the northwest corner of the site. One level of subterranean parking would also be provided throughout the majority of the site beneath the three new buildings. A total of 937 parking spaces would be provided with 585 of the spaces provided below ground for residents and 352 spaces provided in subterranean and surface spaces for commercial patrons.

The project would be constructed to meet the requirements in the City of Los Angeles Green Building Code and California Energy/Title 24 requirements. The project would include, at a minimum low-flow toilets, and other plumbing fixtures, and would incorporate a grey-water system for use in on-site irrigation. The project would also provide a total of 548 bicycle parking spaces for residents and commercial patrons.

Construction activities would occur over a period of approximately 28 months with an anticipated start in the second quarter of 2017. Excavation for the subterranean parking structure is expected to require the export of approximately 165,000 cubic yards of soil from the site.

#### **BACKGROUND INFORMATION**

GHG emissions refer to a group of emissions that are believed to affect global climate conditions. These gases trap heat in the atmosphere and the major concern is that increases in GHG emissions are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, most scientific experts agree that there is a direct link between increased emission of GHGs and long-term global

temperature. What GHGs have in common is that they allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation and warm up the air. The process is similar to the effect a greenhouse has in raising its internal temperature, hence the name greenhouse gases. Both natural processes and human activities emit GHGs. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature; however, it is the scientific consensus that emissions from human activities such as electricity generation and motor vehicle operations have elevated the concentration of GHGs in the atmosphere. This accumulation of GHGs has contributed to an increase in the temperature of the earth's atmosphere and contributed to global climate change.

The principal GHGs are carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ), sulfur hexafluoride ( $SF_6$ ), perfluorocarbons ( $PFC_8$ ), hydrofluorocarbons ( $HFC_8$ ), and water vapor ( $H_2O$ ).  $CO_2$  is the reference gas for climate change because it is the predominant greenhouse gas emitted. To account for the varying warming potential of different GHGs, GHG emissions are often quantified and reported as  $CO_2$  equivalents ( $CO2_e$ ).

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05 on June 1, 2005, which calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions below 1990 levels by 2050 in California. The Secretary of the California Environmental Protection Agency (CalEPA) was charged with coordination of efforts to meet these targets and formed the Climate Action Team (CAT) to implement the Order.

In March 2006, the CAT published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the 2006 CAT Report). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies.

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires the California Air Resources Board (ARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020. As a central requirement of AB 32, the ARB was assigned the task of developing a Scoping Plan that outlines the State's strategy to achieve the 2020 GHG emissions limit. This Scoping Plan, which was developed by the ARB in coordination with the CAT, was published in October 2008. The Scoping Plan proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce the State's dependence on oil, diversify the State's energy sources, save energy, create new jobs, and enhance public health. An important component of the plan is a cap-and-trade program covering 85 percent of the State's emissions. Additional key recommendations of the Scoping Plan include strategies to enhance and expand proven cost-saving energy efficiency programs;

implementation of California's clean cars standards; increases in the amount of clean and renewable energy used to power the State; and implementation of a low-carbon fuel standard that will make the fuels used in the State cleaner. Furthermore, the Scoping Plan also proposed full deployment of the California Solar Initiative, high-speed rail, water-related energy efficiency measures, and a range of regulations to reduce emissions from trucks and from ships docked in California ports. The Scoping Plan was approved by the ARB on December 11, 2008. According to the September 23, 2010 AB 32 Climate Change Scoping Plan Progress Report, 40 percent of the reductions identified in the Scoping Plan have been secured through ARB actions and California is on track to its 2020 goal.<sup>2</sup>

In April 2015, Governor Brown signed Executive Order B-30-15 which establishes a new interim target to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. This interim target is established to ensure that the state meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. Five key goals for reducing GHG emissions through 2030 include: increasing renewable electricity to 50 percent; 2) doubling the energy efficiency savings achieved in existing buildings and making heating fuels cleaner; 3) reducing petroleum use in cars and trucks by up to 50 percent; 4) reducing emissions of short-lived climate pollutants; and 5) managing farms, rangelands, forests and wetlands to increasingly store carbon.

While California has a high amount of total GHG emissions, it has low emissions per capita. California ranks fourth lowest of the 50 states in carbon dioxide emissions per capita. The major source of GHG in California is transportation, contributing approximately 37 percent of the state's total GHG emissions. Industrial sources are the second largest generator, contributing approximately 23 percent of the state's GHG emissions. Residential sources contribute only about seven percent of the state's GHG emissions. This is less than the eight percent generated by agriculture.

The City of Los Angeles has begun to address the issue of global climate change by publishing Green LA, An Action Plan to Lead the Nation in Fighting Global Warming (LA Green Plan). This document outlines the goals and actions the City has established to reduce the generation and emission of GHGs from both public and private activities. According to the LA Green Plan, the City of Los Angeles is committed to the goal of reducing emissions of CO<sub>2</sub> to 35 percent below 1990 levels. To achieve this, the City will:

- Increase the generation of renewable energy;
- Improve energy conservation and efficiency; and
- Change transportation and land use patterns to reduce dependence on automobiles.

<sup>2</sup> California Air Resources Board, 2010.

#### THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G to the CEQA Guidelines, a project could have a potentially significant impact associated with GHG emissions if any of the following were to occur:

- (a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) Conflict with an applicable plan, policy or regulation for the purpose of reducing the emissions of GHG.

#### PROJECT IMPACTS

#### Generation of Greenhouse Gas Emissions

**Threshold**: Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Impact**: The proposed project would generate greenhouse gas emissions, but would not exceed the draft thresholds of significance being considered by the SCAQMD. The impact of the proposed project would be less than significant.

#### Impact Analysis

CEQA defines a "significant effect on the environment" as a substantial, or potentially substantial, adverse change in the environment.<sup>3</sup> With respect to global climate change, no one project can individually create a direct impact on what is a global problem (i.e., no project will, by itself, raise the temperature of the planet).

However, the emissions generated by a project may be "cumulatively considerable," meaning "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The CEQA Guidelines add that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of

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<sup>&</sup>lt;sup>3</sup> Public Resources Code Section 21068.

<sup>&</sup>lt;sup>4</sup> CEQA Guidelines Section 15065(a)(3).

greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.<sup>5</sup>

Generally, the evaluation of an impact under CEQA requires measuring data from a project against a "threshold of significance." Furthermore, "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." For greenhouse gas emissions and global warming, there is not, at this time, one established, universally agreed-upon "threshold of significance" by which to measure an impact.

The City of Los Angeles relies upon the expert guidance of the South Coast Air Quality Management District (SCAQMD) regarding the methodology and thresholds of significance for the evaluation of air quality impacts within the South Coast Air Basin. GHG emissions are air pollutants that are subject to local control by the SCAQMD. As such, the City looks to the SCAQMD for guidance in the evaluation of GHG impacts.

The SCAQMD has been evaluating GHG significance thresholds since April 2008. In December 2008, the SCAQMD adopted an interim 10,000 MTCO<sub>2</sub>e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD has continued to consider adoption of significance thresholds for residential and general development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- **Tier 1** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- **Tier 2** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearings and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MTCO<sub>2</sub>e/year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MTCO<sub>2</sub>e/year), commercial projects (1,400 MTCO<sub>2</sub>e/year), and mixed-use projects (3,000 MTCO<sub>2</sub>e/year). Under option 2 a single numerical screening threshold of 3,000 MTCO<sub>2</sub>e/year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

<sup>&</sup>lt;sup>5</sup> CEQA Guidelines Section 15064(h)(3).

<sup>&</sup>lt;sup>6</sup> CEQA Guidelines Section 15064.7.

<sup>&</sup>lt;sup>7</sup> CEQA Guidelines Section 15064.7(c).

- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MTCO<sub>2</sub>e per service population for project level analyses and 6.6 MTCO<sub>2</sub>e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- **Tier 5** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

However, for the purpose of evaluating the GHG impacts associated with the proposed project, this analysis utilizes the SCAQMD's draft tiered thresholds. The SCAQMD's draft thresholds have also been utilized for other projects in the City of Los Angeles.

#### Tier 1

The proposed project is subject to CEQA, but no categorical exemptions are applicable to the project. Therefore, the analysis moves to Tier 2.

#### Tier 2

The proposed project would be required to comply with the City of Los Angeles Green Building Program Ordinance, which would reduce the GHG emissions that would be associated with operation of the proposed new building. However, neither the SCAQMD nor the City of Los Angeles have adopted a GHG reduction plan that has gone through public hearings and CEQA review, that has an approved inventory, includes monitoring, etc. Therefore, the analysis moves to Tier 3.

#### Tier 3

The estimated annual construction-related and operational GHG emissions associated with the proposed project and existing site uses have been calculated utilizing the the California Emissions Estimator Model (CalEEMod v. 2013.2.2) recommended by the SCAQMD. These emissions are shown in Table 1. As shown, the net increase in annual emissions would exceed the draft 3,000 MTCO<sub>2</sub>e threshold for mixed-use projects. Therefore, the analysis moves to Tier 4.

| TABLE 1 - ESTIMATED PROJECT ANNUAL GHG EMISSIONS |   |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|
| Emissions Source Category                        | CO <sub>2</sub> e in Metric Tons per Year |  |  |  |  |  |  |  |  |  |  |
| Proposed Project                                 |   |  |  |  |  |  |  |  |  |  |  |

TABLE 1 - ESTIMATED PROJECT ANNUAL GHG EMISSIONS

| Emissions Source Category     | CO <sub>2</sub> e in Metric Tons per Year |
|-------------------------------|---|
| Construction                  | 118.7                                     |
| Operation                     |   |
| Area Sources                  | 7.6                                       |
| Energy Sources                | 3,214.4                                   |
| Mobile Sources                | 7,545.7                                   |
| Waste Disposal                | 110.0                                     |
| Water & Wastewater            | 242.5                                     |
| Total Emissions               | 11,238.9                                  |
| Existing Site Us              | es  |
| Area Sources                  | 2.2                                       |
| Energy Sources                | 965.8                                     |
| Mobile Sources                | 6,829.6                                   |
| Waste Disposal                | 65.7                                      |
| Water & Wastewater            | 91.2                                      |
| Total Emissions               | 7,952.3                                   |
| Total Net Change              | 3,286.6                                   |
| SCAQMD Draft Tier 3 Threshold | 3,000.0                                   |
| Exceeds Threshold?            | No  |

Construction emissions are amortized over 30 years in accordance with SCAQMD guidance  $(3,561.38 \text{ MTCO}_{2}\text{e}/30 \text{ years})$ .

The operational emissions shown in this table are the mitigated overall operational emissions totals shown on page 7 of the CalEEMod results sheets for the proposed project (Appendix A) and page 5 of the CalEEMod results sheets for the existing uses at the project site (Appendix B). The emissions for the proposed project account for green building features proposed for the project. Building energy efficiency, water use reduction, and solid waste diversion in CalEEMod is only allowed to be entered as mitigation even though it is proposed for the project or required by the City of Los Angeles Green Building Code. No project-specific mitigation measures are identified for this project.

CalEEMod result sheets are provided in Appendix A and Appendix B.

#### Tier 4

The SCAQMD's draft thresholds defines the service population as the total residents and employees associated with a project. This may be appropriate for regional or community-wide analyses in which most people are either residents or employees and the two cross over (residents of the community are also employees in the community). In the case of a general development project, the service population consists of residents, employees, customers, vendors, students, etc. In the case of a commercial project, employees may be only about two percent of the number of people that visit a site. The vast majority of

people visiting a commercial project are customers with a smaller number of vendors (delivery and sales). It does not make sense to consider only the employees as the service population for commercial uses such as the ones proposed for the project. The employees are at a site to serve the needs of their customers. Therefore, this analysis assumes that the service population is everyone that would access the project site including residents, employees, customers, and vendors.

The proposed project is expected to accommodate approximately 1,258 residents based on an overage of 2.86 persons per unit. The number of people tat would be employed at the site is unknown, but the total commercial use service population can be roughly estimated by dividing the number of potential daily vehicle trips generated by the proposed commercial uses by two. The vehicle trip numbers are divided by two since each service population member would make one trip to the site and one trip from the site (one person, two trips). This is a very conservative assumption since each vehicle is assumed to accommodate only one person, whereas, many of the vehicles would accommodate more than one person.

The proposed commercial uses are expected to generate approximately 5,479 average daily vehicle trips per weekday based upon the trip generation rate identified in the Technical Traffic Evaluation prepared for the proposed project.<sup>8</sup> This number is the total trips that would be generated by the proposed land use prior to any credit for internal capture and pass-by trips. This is appropriate since it identifies a trip generation estimate for the entire commercial service population. Dividing this number by two identifies a conservative commercial service population of approximately 2,740 employees, customers, and vendors. Adding the 1,258 residents to this number presents a total project site service population of 3,998 persons.

Dividing the project's 11,238.9 MTCO<sub>2</sub>e annual GHG emissions by the 3,998 service population yields an efficiency of 2.81 MTCO<sub>2</sub>e of GHGs per service population member. If one considers that the daily service population for the project would likely be greater if more than one person per vehicle were to travel to the commercial uses at the site, the actual emissions per service population would be even lower. However, the analysis demonstrates that the GHG emissions per service population would be substantially less than the SCAQMD's draft threshold of 4.8 MTCO<sub>2</sub>e per service population. Therefore the City of Los Angeles, as lead agency, may conclude that the GHG emissions generated in association with the proposed project would not have a significant impact on the environment.

#### **Consistency with GHG Plans**

**Threshold**: Would the proposed project conflict with an applicable plan, policy or regulation for the purpose of reducing the emissions of GHG?

<sup>&</sup>lt;sup>8</sup> Overland Traffic Consultants, Inc., 2016.

**Impact**: The proposed project would generate greenhouse gas emissions, but would be consistent with applicable plans to reduce greenhouse gas emissions in California. The impact of the proposed project would be less than significant.

#### **Impact Analysis**

As discussed previously, the 2006 CAT Report and the ARB's Scoping Plan were developed to direct the state to reduce GHG emissions to 1990 levels. The strategies from the 2006 CAT Report and measures from the ARB's Scoping Plan are applicable to state, regional, and local agencies in the development of plans to reduce GHG emissions, but are not applicable to each and every new general development project. The general intent of these plans, however is to reduce statewide GHG emissions to 1990 levels by 2020.

As discussed previously, the SCAQMD's Tier 4 draft 4.8 MTCO<sub>2</sub>e per service population efficiency target was established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. As shown in the previous analysis, the proposed project would have an efficiency of no more than 2.81 MTCO<sub>2</sub>e of GHGs per service population member. Therefore, the proposed project would be consistent with the goals of AB 32.

Strategies and measures have been also been implemented on the state level by example of the new Title 24 California Green Building Standards (CALGreen) Code and on the local level by the City of Los Angeles Green Building Ordinance.

Although not originally intended to reduce greenhouse gases, California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. Since then, Title 24 has been amended with a recognition that energy-efficient buildings that require less electricity and reduce fuel consumption, which in turn decreases GHG emissions. The current 2013 Title 24 standards (effective as of January 1, 2014 and supplemented as of July 1, 2015) were adopted to respond, amongst other reasons, to the requirements of AB 32. Specifically, new development projects constructed within California after January 1, 2014 are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the CALGreen Code (CCR, Title 24, Part 11).

The City of Los Angeles has adopted portions of the current CALGreen standards (with amendments) in its Green Building Code (Ordinance No. 182849). The Los Angeles Green Building Code applies to the following types of projects:

- All new buildings (residential and non-residential);
- All additions (residential and non-residential);

- Alterations with building valuations of \$200,000 or more (residential and non-residential); and
- Residential alterations that increase the buildings conditioned volume.

Mandatory measures that would be applicable to the proposed project and that would help to reduce potential GHG emissions include the following:

#### Residential Uses

- 99.04.106.4. Electric Vehicle (EV) charging for new construction. New construction shall comply with Section 99.04.106.4.1 and 99.04.106.4.2 to facilitate future installation of electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be installed in accordance with California Electrical Code, Article 625.
  - 99.04.106.4.2. Multifamily Dwellings. At least five percent of the total parking spaces
    provided for all types of parking facilities, but in no case less than one location, shall be
    capable of supporting future EVSE.
- 99.04.106.5. Cool Roof for Reduction of Heat Island Effect.
  - 99.04.106.5.1. Solar Reflectance. Roofing material shall have a minimum 3-year aged solar reflectance equal to or greater than 0.63 for a roof slope ≤2:12 or 0.20 for a slop >2:12.
  - 99.04.106.5.2. Thermal Emittance. Roofing material shall have a Cool Roof Rating Council (CRRC) initial or aged thermal emittance equal to or greater than 0.75.
- 99.04.106.7. Reduction of Heat Island Effect for Nonroof Areas. Reduce non roof heat islands for 25 percent of pathways, patios, driveways, or other paced areas.
- 99.04.211.4. Solar Ready Buildings.
- 99.04.211.5. Space for Future Electrical Solar System Installation. With limited exceptions, buildings
  shall provide a minimum or 250 square feet of contiguous unobstructed roof area for the installation
  of future solar photovoltaic or other electrical solar panels.

#### Non-Residential Uses

- 99.05.106.5.3. Electric Vehicle (EV) Charging. Provide infrastructure to facilitate future installation of
  electric vehicle supply equipment (EVSE). EVSE and all devices related to EV charging shall be
  installed in compliance with the California Building Code Section 406.9, the California Electrical Code
  Article 625, and as follows:
  - 99,05,106.5.3.1. Charging Locations. Parking facilities shall have five (5) percent of the total parking spaces, but not less than one (1), capable of supporting future EVSE charging locations.

99.05.211.1. Solar Ready Buildings. Comply with Section 110.10 of the California Energy Code.

The proposed project would be subject to the mandatory measures of the Los Angeles Green Building Code. Based on this information, the proposed project would not conflict with an applicable plan, policy or regulation for the purpose of reducing the emissions of GHGs. The impact of the proposed project would be less than significant.

#### **CUMULATIVE IMPACTS**

As discussed above, emitting GHGs into the atmosphere is not itself an adverse environmental effect. Rather, it is the increased accumulation of GHGs in the atmosphere that may result in global climate change; the consequences of which may result in adverse environmental effects. The state has mandated a goal of reducing state-wide emissions to 1990 levels by 2020, even though state-wide population and commerce is expected to grow substantially. As discussed above, the 2.81 MTCO<sub>2</sub>e of GHGs per service population member would be less than the SCAQMD's draft threshold of 4.8 MTCO<sub>2</sub>e per service population. This efficiency target was established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. For these reasons, the contribution of the project to the cumulative effect of global climate change is not considered to be cumulatively considerable.

#### **REFERENCES**

California Air Resources Board. December 2008. Climate Change Scoping Plan.

California Air Resources Board. September 23, 2010. AB 32 Climate Change Scoping Plan Progress Report.

California Environmental Protection Agency. March 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature.

California Natural Resources Agency. 2016. 2016 California Environmental Quality Act (CEQA) Statute and Guidelines. Association of Environmental Professionals.

Los Angeles, City of. December 2013. Ordinance No. 182849: Los Angeles Green Building Code.

Overland Traffic Consultants, Inc. July 19, 2016. Technical Traffic Evaluation for the Proposed Mixed-Use Project at 11147 Woodley Avenue & 16201-16301 San Fernando Missions Boulevard.

South Coast Air Quality Management District. December 5, 2008. Board Meeting Agenda Item 31.

# APPENDIX A PROPOSED PROJECT EMISSIONS CALCULATION DATA

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# **Woodley & SF Mission - Proposed Project**

#### Los Angeles-South Coast County, Annual

# 1.0 Project Characteristics

## 1.1 Land Usage

| Land Uses                      | Size                           | Metric        | Lot Acreage | Floor Surface Area | Population |
|--------------------------------|--------------------------------|---------------|-------------|--------------------|------------|
| Enclosed Parking with Elevator | 826.00                         | Space         | 0.00        | 330,400.00         | 0          |
| Parking Lot                    | 111.00                         | Space         | 2.45        | 44,400.00          | 0          |
| Apartments Mid Rise            | 440.00                         | Dwelling Unit | 5.50        | 440,000.00         | 1258       |
| Regional Shopping Center       | Regional Shopping Center 16.25 |               | 0.00        | 16,245.00          | 0          |
| Supermarket                    | 46.80                          | 1000sqft      | 0.00        | 46,800.00          | 0          |

#### 1.2 Other Project Characteristics

| Urbanization               | Urban            | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 12               |                            |       | Operational Year           | 2020  |
| Utility Company            | Los Angeles Depa | rtment of Water & Power    |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 1227.89          | CH4 Intensity<br>(lb/MWhr) | 0.029 | N2O Intensity<br>(Ib/MWhr) | 0.006 |

#### 1.3 User Entered Comments & Non-Default Data

#### Project Characteristics -

Land Use - Default lot acreage numbers revised to reflect proposed site plan.

Construction Phase - Default construction schedule revised to relect anticipated construction schedule.

Off-road Equipment - Three air compressors added to the default mix of architectural coating phase equipment.

Off-road Equipment -

Off-road Equipment - Two excavators added to the default list of grading phase equipment.

Off-road Equipment - Two cranes, two cement and mortar mixers, and one welder added to the default list of paving phase equipment.

Demolition -

Grading - Assumes grading of the entire 7.95-acre project site.

Architectural Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Vehicle Trips - Default trip rates for non-residential uses have been revised to be consistent with the Technical Traffic Evaluation prepared for the proposed project including the 5% reduction for internal trips.

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Woodstoves - Assumes no fireplaces.

Area Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Water And Wastewater - Assumes a limited amount of water use for outdoor landscaping (default for supermarket).

Sequestration - Assumes a minimum of 287 new trees planted per current project site plans.

Construction Off-road Equipment Mitigation - Assumes required compliance with SCAQMD Rule 403 for fugitive dust.

Energy Mitigation - Assumes a minimum building energy efficiency of 15% per CalGreen Code.

Water Mitigation - Assumes use of grey water for landscape irrigation and indoor water use reduction per CalGreen Code.

Waste Mitigation - Assumes a minimum 50% solid waste reduction per current city requirements.

Off-road Equipment - Deleted two excavators from default list of equipment for demolition since only one is expected to be used at the site.

| Table Name              | Column Name                     | Default Value | New Value |
|-------------------------|---------------------------------|---------------|-----------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior      | 250.00        | 50.00     |
| tblArchitecturalCoating | EF_Nonresidential_Interior      | 250.00        | 50.00     |
| tblArchitecturalCoating | EF_Residential_Exterior         | 100.00        | 50.00     |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 250           | 50        |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 250           | 50        |
| tblAreaCoating          | Area_EF_Residential_Exterior    | 100           | 50        |

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| tblAreaMitigation    | UseLowVOCPaintNonresidentialExteriorV alue | 50        | 250        |
|----------------------|--|-----------|------------|
| tblConstructionPhase | NumDays                                    | 20.00     | 227.00     |
| tblConstructionPhase | NumDays                                    | 230.00    | 437.00     |
| tblConstructionPhase | NumDays                                    | 20.00     | 35.00      |
| tblConstructionPhase | NumDays                                    | 20.00     | 101.00     |
| tblConstructionPhase | NumDays                                    | 20.00     | 155.00     |
| tblConstructionPhase | NumDaysWeek                                | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                | 5.00      | 6.00       |
| tblConstructionPhase | NumDaysWeek                                | 5.00      | 6.00       |
| tblConstructionPhase | PhaseEndDate                               | 4/23/2020 | 9/27/2019  |
| tblConstructionPhase | PhaseEndDate                               | 8/1/2019  | 8/2/2019   |
| tblConstructionPhase | PhaseEndDate                               | 9/7/2017  | 9/8/2017   |
| tblConstructionPhase | PhaseEndDate                               | 3/8/2018  | 3/9/2018   |
| tblConstructionPhase | PhaseStartDate                             | 8/3/2019  | 1/7/2019   |
| tblConstructionPhase | PhaseStartDate                             | 3/10/2018 | 3/12/2018  |
| tblConstructionPhase | PhaseStartDate                             | 5/13/2017 | 5/15/2017  |
| tblConstructionPhase | PhaseStartDate                             | 9/9/2017  | 9/11/2017  |
| tblFireplaces        | NumberGas                                  | 374.00    | 0.00       |
| tblFireplaces        | NumberNoFireplace                          | 44.00     | 440.00     |
| tblFireplaces        | NumberWood                                 | 22.00     | 0.00       |
| tblGrading           | AcresOfGrading                             | 12.50     | 7.95       |
| tblGrading           | MaterialExported                           | 0.00      | 165,000.00 |
| tblLandUse           | LandUseSquareFeet                          | 16,250.00 | 16,245.00  |
| tblLandUse           | LotAcreage                                 | 7.43      | 0.00       |
| tblLandUse           | LotAcreage                                 | 1.00      | 2.45       |
| tblLandUse           | LotAcreage                                 | 11.58     | 5.50       |
|                      |  |           |            |

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| tblLandUse                | LotAcreage                 | 0.37          | 0.00                                    |
|---------------------------|----------------------------|---------------|---|
| tblLandUse                | LotAcreage                 | 1.07          | 0.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00          | 4.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 3.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 1.00          | 3.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 2.00          | 1.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 2.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 2.00                                    |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount | 0.00          | 1.00                                    |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblOffRoadEquipment       | PhaseName                  |               | Parking Structure Construction & Paving |
| tblProjectCharacteristics | OperationalYear            | 2014          | 2020                                    |
| tblSequestration          | NumberOfNewTrees           | 0.00          | 287.00                                  |
| tblVehicleTrips           | ST_TR                      | 49.97         | 47.47                                   |
| tblVehicleTrips           | ST_TR                      | 177.59        | 168.71                                  |
| tblVehicleTrips           | SU_TR                      | 25.24         | 23.98                                   |
| tblVehicleTrips           | SU_TR                      | 166.44        | 158.12                                  |
| tblVehicleTrips           | WD_TR                      | 42.94         | 40.57                                   |
| tblVehicleTrips           | WD_TR                      | 102.24        | 97.13                                   |
| tblWater                  | OutdoorWaterUseRate        | 18,073,160.15 | 0.00                                    |
| tblWater                  | OutdoorWaterUseRate        | 737,738.42    | 0.00                                    |
| tblWoodstoves             | NumberCatalytic            | 22.00         | 0.00                                    |
| tblWoodstoves             | NumberNoncatalytic         | 22.00         | 0.00                                    |

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# 2.0 Emissions Summary

#### 2.1 Overall Construction

#### **Unmitigated Construction**

|       | ROG           | NOx     | СО      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------|---------------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Year  | tons/yr MT/yr |         |         |        |                  |                 |               |                   |                  |                |          |                |                |        |        |                |
| 2017  | 0.5757        | 6.8163  | 5.1383  | 0.0118 | 0.3299           | 0.2509          | 0.5808        | 0.1046            | 0.2317           | 0.3363         | 0.0000   | 1,059.902<br>3 | 1,059.902<br>3 | 0.1053 | 0.0000 | 1,062.113<br>2 |
| 2018  | 0.7666        | 5.1876  | 8.0917  | 0.0172 | 0.8444           | 0.2448          | 1.0892        | 0.2263            | 0.2293           | 0.4556         | 0.0000   | 1,353.297<br>4 | 1,353.297<br>4 | 0.1284 | 0.0000 | 1,355.993<br>9 |
| 2019  | 3.1106        | 3.9184  | 6.7188  | 0.0149 | 0.7413           | 0.1959          | 0.9372        | 0.1984            | 0.1873           | 0.3857         | 0.0000   | 1,141.310<br>3 | 1,141.310<br>3 | 0.0935 | 0.0000 | 1,143.274<br>1 |
| Total | 4.4528        | 15.9222 | 19.9488 | 0.0438 | 1.9155           | 0.6916          | 2.6071        | 0.5292            | 0.6484           | 1.1776         | 0.0000   | 3,554.510<br>1 | 3,554.510<br>1 | 0.3272 | 0.0000 | 3,561.381<br>3 |

## **Mitigated Construction**

|       | ROG    | NOx           | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------|--------|---------------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Year  |        | tons/yr MT/yr |         |        |                  |                 |               |                   |                  |                |          |                |                |        |        |                |
| 2017  | 0.5757 | 6.8163        | 5.1383  | 0.0118 | 0.2531           | 0.2509          | 0.5039        | 0.0748            | 0.2317           | 0.3065         | 0.0000   | 1,059.901<br>9 | 1,059.901<br>9 | 0.1053 | 0.0000 | 1,062.112<br>9 |
| 2018  | 0.7666 | 5.1876        | 8.0917  | 0.0172 | 0.8444           | 0.2448          | 1.0892        | 0.2263            | 0.2293           | 0.4556         | 0.0000   | 1,353.297<br>0 | 1,353.297<br>0 | 0.1284 | 0.0000 | 1,355.993<br>5 |
| 2019  | 3.1106 | 3.9184        | 6.7188  | 0.0149 | 0.7413           | 0.1959          | 0.9372        | 0.1984            | 0.1873           | 0.3857         | 0.0000   | 1,141.309<br>9 | 1,141.309<br>9 | 0.0935 | 0.0000 | 1,143.273<br>7 |
| Total | 4.4528 | 15.9222       | 19.9487 | 0.0438 | 1.8387           | 0.6916          | 2.5303        | 0.4994            | 0.6484           | 1.1478         | 0.0000   | 3,554.508<br>9 | 3,554.508<br>9 | 0.3272 | 0.0000 | 3,561.380<br>0 |

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|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 4.01             | 0.00            | 2.95          | 5.63              | 0.00             | 2.53           | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

# 2.2 Overall Operational

# **Unmitigated Operational**

|          | ROG    | NOx     | СО                  | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|----------|--------|---------|---------------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| Category |        |         |                     |                 | ton              | s/yr            |               |                   |                  |                |          |                 | MT              | /yr             |        |                 |
| Area     | 3.5608 | 0.0528  | 4.5655              | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                   | 0.0251           | 0.0251         | 0.0000   | 7.4369          | 7.4369          | 7.2900e-<br>003 | 0.0000 | 7.5900          |
| Energy   | 0.0229 | 0.1989  | 0.1067              | 1.2500e-<br>003 |                  | 0.0158          | 0.0158        |                   | 0.0158           | 0.0158         | 0.0000   | 3,519.941<br>9  | 3,519.941<br>9  | 0.0821          | 0.0203 | 3,527.943<br>2  |
| Mobile   | 4.1846 | 9.8750  | 40.9930             | 0.1070          | 7.0008           | 0.1513          | 7.1521        | 1.8753            | 0.1395           | 2.0148         | 0.0000   | 7,539.672<br>5  | 7,539.672<br>5  | 0.2883          | 0.0000 | 7,545.726<br>5  |
| Waste    |        |         | <br> <br> <br> <br> |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 98.1279  | 0.0000          | 98.1279         | 5.7992          | 0.0000 | 219.9109        |
| Water    | ,      |         | 1<br> <br>          |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 11.3071  | 259.5752        | 270.8823        | 1.1675          | 0.0287 | 304.2932        |
| Total    | 7.7683 | 10.1266 | 45.6651             | 0.1085          | 7.0008           | 0.1922          | 7.1930        | 1.8753            | 0.1804           | 2.0557         | 109.4349 | 11,326.62<br>65 | 11,436.06<br>14 | 7.3444          | 0.0489 | 11,605.46<br>37 |

# 2.2 Overall Operational

# **Mitigated Operational**

|          | ROG    | NOx     | СО                   | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|----------|--------|---------|----------------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| Category |        |         |                      |                 | ton              | s/yr            |               |                   |                  |                |          |                 | MT              | /yr             |        |                 |
| Area     | 3.5608 | 0.0528  | 4.5655               | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                   | 0.0251           | 0.0251         | 0.0000   | 7.4369          | 7.4369          | 7.2900e-<br>003 | 0.0000 | 7.5900          |
| Energy   | 0.0205 | 0.1784  | 0.0964               | 1.1200e-<br>003 |                  | 0.0142          | 0.0142        | <br>              | 0.0142           | 0.0142         | 0.0000   | 3,207.147<br>4  | 3,207.147<br>4  | 0.0748          | 0.0184 | 3,214.424<br>0  |
| Mobile   | 4.1846 | 9.8750  | 40.9930              | 0.1070          | 7.0008           | 0.1513          | 7.1521        | 1.8753            | 0.1395           | 2.0148         | 0.0000   | 7,539.672<br>5  | 7,539.672<br>5  | 0.2883          | 0.0000 | 7,545.726<br>5  |
| Waste    |        |         |                      |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 49.0639  | 0.0000          | 49.0639         | 2.8996          | 0.0000 | 109.9554        |
| Water    |        |         | 1<br> <br> <br> <br> |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 9.0456   | 206.7770        | 215.8226        | 0.9338          | 0.0229 | 242.5351        |
| Total    | 7.7659 | 10.1061 | 45.6549              | 0.1084          | 7.0008           | 0.1905          | 7.1913        | 1.8753            | 0.1788           | 2.0541         | 58.1096  | 10,961.03<br>37 | 11,019.14<br>33 | 4.2038          | 0.0413 | 11,120.23<br>10 |

|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4   | N20   | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|-------|-------|------|
| Percent<br>Reduction | 0.03 | 0.20 | 0.02 | 0.12 | 0.00             | 0.85            | 0.02          | 0.00              | 0.91             | 0.08           | 46.90    | 3.23     | 3.65      | 42.76 | 15.59 | 4.18 |

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#### 2.3 Vegetation

#### **Vegetation**

|           | CO2e     |
|-----------|----------|
| Category  | MT       |
| New Trees | 203.1960 |
| Total     | 203.1960 |

#### 3.0 Construction Detail

#### **Construction Phase**

| Phase<br>Number | Phase Name                              | Phase Type            | Start Date | End Date  | Num Days<br>Week | Num Days | Phase Description |
|-----------------|---|-----------------------|------------|-----------|------------------|----------|-------------------|
| 1               | Demolition                              | Demolition            | 4/3/2017   | 5/12/2017 | 6                | 35       |                   |
| 2               | Grading & Excavation                    | Grading               | 5/15/2017  | 9/8/2017  | 6                | 101      |                   |
|                 | Parking Structure Construction & Paving | Paving                | 9/11/2017  | 3/9/2018  | 6                | 155      |                   |
| 4               | Building Construction                   | Building Construction | 3/12/2018  | 8/2/2019  | 6                | 437      |                   |
| 5               | Architectural Coating                   | Architectural Coating | 1/7/2019   | 9/27/2019 | 6                | 227      |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 891,000; Residential Outdoor: 297,000; Non-Residential Indoor: 719,579; Non-Residential Outdoor: 239,860 (Architectural Coating – sqft)

# OffRoad Equipment

| Phase Name                              | Offroad Equipment Type    | Amount  | Usage Hours | Horse Power | Load Factor |
|---|---------------------------|---------|-------------|-------------|-------------|
| Demolition                              | Concrete/Industrial Saws  | 1       | 8.00        | 81          | 0.73        |
| Demolition                              | Excavators                | 1       | 8.00        | 162         | 0.38        |
| Demolition                              | Rubber Tired Dozers       | 2       | 8.00        | 255         | 0.40        |
| Grading & Excavation                    | Excavators                | 3       | 8.00        | 162         | 0.38        |
| Grading & Excavation                    | Graders                   | 1       | 8.00        | 174         | 0.41        |
| Grading & Excavation                    | Rubber Tired Dozers       | 1       | 8.00        | 255         | 0.40        |
| Grading & Excavation                    | Tractors/Loaders/Backhoes | 3       | 8.00        | 97          | 0.37        |
| Parking Structure Construction & Paving | Cement and Mortar Mixers  | 2       | 6.00        | 9           | 0.56        |
| Parking Structure Construction & Paving | Cranes                    | 2       | 6.00        | 226         | 0.29        |
| Parking Structure Construction & Paving | Pavers                    | 1       | 8.00        | 125         | 0.42        |
| Parking Structure Construction & Paving | Paving Equipment          | 1       | 8.00        | 130         | 0.36        |
| Parking Structure Construction & Paving | Rollers                   | 1       | 8.00        | 80          | 0.38        |
| Parking Structure Construction & Paving | Welders                   | 1       | 6.00        | 46          | 0.45        |
| Building Construction                   | Cranes                    | 1       | 7.00        | 226         | 0.29        |
| Building Construction                   | Forklifts                 | 3       | 8.00        | 89          | 0.20        |
| Building Construction                   | Generator Sets            | 1       | 8.00        | 84          | 0.74        |
| Building Construction                   | Tractors/Loaders/Backhoes | 3       | 7.00        | 97          | 0.37        |
| Building Construction                   | Welders                   | <br>  1 | 8.00        | 46          | 0.45        |
| Architectural Coating                   | Air Compressors           | 4       | 6.00        | 78          | 0.48        |

**Trips and VMT** 

| Phase Name            | Offroad Equipment<br>Count | Worker Trip<br>Number | Vendor Trip<br>Number | Hauling Trip<br>Number | Worker Trip<br>Length | Vendor Trip<br>Length | Hauling Trip<br>Length | Worker Vehicle<br>Class | Vendor<br>Vehicle Class | Hauling<br>Vehicle Class |
|-----------------------|----------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Demolition            | 6                          | 15.00                 | 0.00                  | 343.00                 | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Grading & Excavation  | 8                          | 20.00                 | 0.00                  | 20,625.00              | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Parking Structure     | 8                          | 20.00                 | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Building Construction | 9                          | 530.00                | 133.00                | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |
| Architectural Coating | 4                          | 106.00                | 0.00                  | 0.00                   | 14.70                 | 6.90                  | 20.00                  | LD_Mix                  | HDT_Mix                 | HHDT                     |

# **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Demolition - 2017

**Unmitigated Construction On-Site** 

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | MT        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.0371           | 0.0000          | 0.0371        | 5.6200e-<br>003   | 0.0000           | 5.6200e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0582 | 0.6066 | 0.4734 | 5.1000e-<br>004 |                  | 0.0303          | 0.0303        |                   | 0.0283           | 0.0283          | 0.0000   | 46.8960   | 46.8960   | 0.0123 | 0.0000 | 47.1546 |
| Total         | 0.0582 | 0.6066 | 0.4734 | 5.1000e-<br>004 | 0.0371           | 0.0303          | 0.0674        | 5.6200e-<br>003   | 0.0283           | 0.0339          | 0.0000   | 46.8960   | 46.8960   | 0.0123 | 0.0000 | 47.1546 |

3.2 Demolition - 2017

<u>Unmitigated Construction Off-Site</u>

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /уг             |        |         |
| Hauling  | 2.9600e-<br>003 | 0.0465          | 0.0370 | 1.3000e-<br>004 | 2.9400e-<br>003  | 6.5000e-<br>004 | 3.5900e-<br>003 | 8.1000e-<br>004   | 6.0000e-<br>004  | 1.4000e-<br>003 | 0.0000   | 11.5089   | 11.5089   | 9.0000e-<br>005 | 0.0000 | 11.5107 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Worker   | 1.0300e-<br>003 | 1.5200e-<br>003 | 0.0158 | 4.0000e-<br>005 | 2.8800e-<br>003  | 3.0000e-<br>005 | 2.9000e-<br>003 | 7.6000e-<br>004   | 2.0000e-<br>005  | 7.9000e-<br>004 | 0.0000   | 2.7017    | 2.7017    | 1.5000e-<br>004 | 0.0000 | 2.7048  |
| Total    | 3.9900e-<br>003 | 0.0480          | 0.0528 | 1.7000e-<br>004 | 5.8200e-<br>003  | 6.8000e-<br>004 | 6.4900e-<br>003 | 1.5700e-<br>003   | 6.2000e-<br>004  | 2.1900e-<br>003 | 0.0000   | 14.2106   | 14.2106   | 2.4000e-<br>004 | 0.0000 | 14.2155 |

## **Mitigated Construction On-Site**

|               | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|--------|--------|---------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | MT        | /yr    |        |         |
| Fugitive Dust |        |        |        |                 | 0.0145           | 0.0000          | 0.0145        | 2.1900e-<br>003   | 0.0000           | 2.1900e-<br>003 | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Off-Road      | 0.0582 | 0.6066 | 0.4734 | 5.1000e-<br>004 |                  | 0.0303          | 0.0303        |                   | 0.0283           | 0.0283          | 0.0000   | 46.8960   | 46.8960   | 0.0123 | 0.0000 | 47.1546 |
| Total         | 0.0582 | 0.6066 | 0.4734 | 5.1000e-<br>004 | 0.0145           | 0.0303          | 0.0447        | 2.1900e-<br>003   | 0.0283           | 0.0305          | 0.0000   | 46.8960   | 46.8960   | 0.0123 | 0.0000 | 47.1546 |

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3.2 **Demolition - 2017** 

## **Mitigated Construction Off-Site**

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e    |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|---------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /уг             |        |         |
| Hauling  | 2.9600e-<br>003 | 0.0465          | 0.0370 | 1.3000e-<br>004 | 2.9400e-<br>003  | 6.5000e-<br>004 | 3.5900e-<br>003 | 8.1000e-<br>004   | 6.0000e-<br>004  | 1.4000e-<br>003 | 0.0000   | 11.5089   | 11.5089   | 9.0000e-<br>005 | 0.0000 | 11.5107 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000  |
| Worker   | 1.0300e-<br>003 | 1.5200e-<br>003 | 0.0158 | 4.0000e-<br>005 | 2.8800e-<br>003  | 3.0000e-<br>005 | 2.9000e-<br>003 | 7.6000e-<br>004   | 2.0000e-<br>005  | 7.9000e-<br>004 | 0.0000   | 2.7017    | 2.7017    | 1.5000e-<br>004 | 0.0000 | 2.7048  |
| Total    | 3.9900e-<br>003 | 0.0480          | 0.0528 | 1.7000e-<br>004 | 5.8200e-<br>003  | 6.8000e-<br>004 | 6.4900e-<br>003 | 1.5700e-<br>003   | 6.2000e-<br>004  | 2.1900e-<br>003 | 0.0000   | 14.2106   | 14.2106   | 2.4000e-<br>004 | 0.0000 | 14.2155 |

# 3.3 Grading & Excavation - 2017

## **Unmitigated Construction On-Site**

|               | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |          |
| Fugitive Dust |        |        |        |                 | 0.0888           | 0.0000          | 0.0888        | 0.0433            | 0.0000           | 0.0433         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.2111 | 2.2228 | 1.6273 | 2.0400e-<br>003 |                  | 0.1229          | 0.1229        |                   | 0.1131           | 0.1131         | 0.0000   | 189.0325  | 189.0325  | 0.0579 | 0.0000 | 190.2488 |
| Total         | 0.2111 | 2.2228 | 1.6273 | 2.0400e-<br>003 | 0.0888           | 0.1229          | 0.2117        | 0.0433            | 0.1131           | 0.1563         | 0.0000   | 189.0325  | 189.0325  | 0.0579 | 0.0000 | 190.2488 |

# 3.3 Grading & Excavation - 2017

# **Unmitigated Construction Off-Site**

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |                 |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | ⁻/yr            |        |          |
| Hauling  | 0.1780          | 2.7972          | 2.2236 | 7.6900e-<br>003 | 0.1765           | 0.0391          | 0.2157        | 0.0484            | 0.0360           | 0.0844          | 0.0000   | 692.0445  | 692.0445  | 5.1300e-<br>003 | 0.0000 | 692.1523 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Worker   | 3.9500e-<br>003 | 5.8300e-<br>003 | 0.0607 | 1.4000e-<br>004 | 0.0111           | 1.0000e-<br>004 | 0.0112        | 2.9400e-<br>003   | 9.0000e-<br>005  | 3.0300e-<br>003 | 0.0000   | 10.3950   | 10.3950   | 5.7000e-<br>004 | 0.0000 | 10.4069  |
| Total    | 0.1820          | 2.8031          | 2.2842 | 7.8300e-<br>003 | 0.1876           | 0.0392          | 0.2269        | 0.0514            | 0.0361           | 0.0875          | 0.0000   | 702.4395  | 702.4395  | 5.7000e-<br>003 | 0.0000 | 702.5592 |

# **Mitigated Construction On-Site**

|               | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category      |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Fugitive Dust |        |        |        |                 | 0.0346           | 0.0000          | 0.0346        | 0.0169            | 0.0000           | 0.0169         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Off-Road      | 0.2111 | 2.2228 | 1.6273 | 2.0400e-<br>003 |                  | 0.1229          | 0.1229        |                   | 0.1131           | 0.1131         | 0.0000   | 189.0322  | 189.0322  | 0.0579 | 0.0000 | 190.2485 |
| Total         | 0.2111 | 2.2228 | 1.6273 | 2.0400e-<br>003 | 0.0346           | 0.1229          | 0.1576        | 0.0169            | 0.1131           | 0.1300         | 0.0000   | 189.0322  | 189.0322  | 0.0579 | 0.0000 | 190.2485 |

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# 3.3 Grading & Excavation - 2017

#### **Mitigated Construction Off-Site**

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |                 |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | MT        | /yr             |        |          |
| Hauling  | 0.1780          | 2.7972          | 2.2236 | 7.6900e-<br>003 | 0.1765           | 0.0391          | 0.2157        | 0.0484            | 0.0360           | 0.0844          | 0.0000   | 692.0445  | 692.0445  | 5.1300e-<br>003 | 0.0000 | 692.1523 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Worker   | 3.9500e-<br>003 | 5.8300e-<br>003 | 0.0607 | 1.4000e-<br>004 | 0.0111           | 1.0000e-<br>004 | 0.0112        | 2.9400e-<br>003   | 9.0000e-<br>005  | 3.0300e-<br>003 | 0.0000   | 10.3950   | 10.3950   | 5.7000e-<br>004 | 0.0000 | 10.4069  |
| Total    | 0.1820          | 2.8031          | 2.2842 | 7.8300e-<br>003 | 0.1876           | 0.0392          | 0.2269        | 0.0514            | 0.0361           | 0.0875          | 0.0000   | 702.4395  | 702.4395  | 5.7000e-<br>003 | 0.0000 | 702.5592 |

# 3.4 Parking Structure Construction & Paving - 2017

## **Unmitigated Construction On-Site**

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |         |
| Off-Road | 0.1147          | 1.1302 | 0.6430 | 1.0800e-<br>003 |                  | 0.0577          | 0.0577        |                   | 0.0535           | 0.0535         | 0.0000   | 97.4434   | 97.4434   | 0.0286 | 0.0000 | 98.0435 |
| Paving   | 1.9900e-<br>003 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Total    | 0.1167          | 1.1302 | 0.6430 | 1.0800e-<br>003 |                  | 0.0577          | 0.0577        |                   | 0.0535           | 0.0535         | 0.0000   | 97.4434   | 97.4434   | 0.0286 | 0.0000 | 98.0435 |

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# 3.4 Parking Structure Construction & Paving - 2017 <u>Unmitigated Construction Off-Site</u>

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /уг             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Worker   | 3.7600e-<br>003 | 5.5400e-<br>003 | 0.0577 | 1.3000e-<br>004 | 0.0105           | 1.0000e-<br>004 | 0.0106        | 2.7900e-<br>003   | 9.0000e-<br>005  | 2.8800e-<br>003 | 0.0000   | 9.8804    | 9.8804    | 5.4000e-<br>004 | 0.0000 | 9.8917 |
| Total    | 3.7600e-<br>003 | 5.5400e-<br>003 | 0.0577 | 1.3000e-<br>004 | 0.0105           | 1.0000e-<br>004 | 0.0106        | 2.7900e-<br>003   | 9.0000e-<br>005  | 2.8800e-<br>003 | 0.0000   | 9.8804    | 9.8804    | 5.4000e-<br>004 | 0.0000 | 9.8917 |

## **Mitigated Construction On-Site**

|          | ROG             | NOx    | СО               | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|-----------------|--------|------------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category |                 |        |                  |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |         |
| Off-Road | 0.1147          | 1.1302 | 0.6430           | 1.0800e-<br>003 |                  | 0.0577          | 0.0577        |                   | 0.0535           | 0.0535         | 0.0000   | 97.4433   | 97.4433   | 0.0286 | 0.0000 | 98.0434 |
| Paving   | 1.9900e-<br>003 |        | 1<br>1<br>1<br>1 |                 |                  | 0.0000          | 0.0000        | i<br>i            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Total    | 0.1167          | 1.1302 | 0.6430           | 1.0800e-<br>003 |                  | 0.0577          | 0.0577        |                   | 0.0535           | 0.0535         | 0.0000   | 97.4433   | 97.4433   | 0.0286 | 0.0000 | 98.0434 |

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# 3.4 Parking Structure Construction & Paving - 2017 Mitigated Construction Off-Site

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |               |                   |                  |                 |          |           | МТ        | /yr             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Worker   | 3.7600e-<br>003 | 5.5400e-<br>003 | 0.0577 | 1.3000e-<br>004 | 0.0105           | 1.0000e-<br>004 | 0.0106        | 2.7900e-<br>003   | 9.0000e-<br>005  | 2.8800e-<br>003 | 0.0000   | 9.8804    | 9.8804    | 5.4000e-<br>004 | 0.0000 | 9.8917 |
| Total    | 3.7600e-<br>003 | 5.5400e-<br>003 | 0.0577 | 1.3000e-<br>004 | 0.0105           | 1.0000e-<br>004 | 0.0106        | 2.7900e-<br>003   | 9.0000e-<br>005  | 2.8800e-<br>003 | 0.0000   | 9.8804    | 9.8804    | 5.4000e-<br>004 | 0.0000 | 9.8917 |

# 3.4 Parking Structure Construction & Paving - 2018

**Unmitigated Construction On-Site** 

|          | ROG             | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5   | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|---------------|---------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |               |                     |                  |                |          |           | МТ        | /yr    |        |         |
| Off-Road | 0.0609          | 0.6019 | 0.3778 | 6.7000e-<br>004 |                  | 0.0298          | 0.0298        |                     | 0.0277           | 0.0277         | 0.0000   | 59.0386   | 59.0386   | 0.0175 | 0.0000 | 59.4053 |
| , aving  | 1.2200e-<br>003 |        |        |                 |                  | 0.0000          | 0.0000        | <br> <br> <br> <br> | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Total    | 0.0621          | 0.6019 | 0.3778 | 6.7000e-<br>004 |                  | 0.0298          | 0.0298        |                     | 0.0277           | 0.0277         | 0.0000   | 59.0386   | 59.0386   | 0.0175 | 0.0000 | 59.4053 |

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# 3.4 Parking Structure Construction & Paving - 2018 <u>Unmitigated Construction Off-Site</u>

|          | ROG             | NOx             | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /уг             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Worker   | 2.0700e-<br>003 | 3.0900e-<br>003 | 0.0321 | 8.0000e-<br>005 | 6.4700e-<br>003  | 6.0000e-<br>005 | 6.5200e-<br>003 | 1.7200e-<br>003   | 5.0000e-<br>005  | 1.7700e-<br>003 | 0.0000   | 5.8498    | 5.8498    | 3.1000e-<br>004 | 0.0000 | 5.8562 |
| Total    | 2.0700e-<br>003 | 3.0900e-<br>003 | 0.0321 | 8.0000e-<br>005 | 6.4700e-<br>003  | 6.0000e-<br>005 | 6.5200e-<br>003 | 1.7200e-<br>003   | 5.0000e-<br>005  | 1.7700e-<br>003 | 0.0000   | 5.8498    | 5.8498    | 3.1000e-<br>004 | 0.0000 | 5.8562 |

## **Mitigated Construction On-Site**

|          | ROG             | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e    |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|---------|
| Category |                 |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |         |
| Off-Road | 0.0609          | 0.6019 | 0.3777 | 6.7000e-<br>004 |                  | 0.0298          | 0.0298        |                   | 0.0277           | 0.0277         | 0.0000   | 59.0385   | 59.0385   | 0.0175 | 0.0000 | 59.4052 |
| Paving   | 1.2200e-<br>003 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000  |
| Total    | 0.0621          | 0.6019 | 0.3777 | 6.7000e-<br>004 |                  | 0.0298          | 0.0298        |                   | 0.0277           | 0.0277         | 0.0000   | 59.0385   | 59.0385   | 0.0175 | 0.0000 | 59.4052 |

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# 3.4 Parking Structure Construction & Paving - 2018

#### **Mitigated Construction Off-Site**

|          | ROG             | NOx             | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|-----------------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |                 |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | /уг             |        |        |
| Hauling  | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Vendor   | 0.0000          | 0.0000          | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000          | 0.0000            | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Worker   | 2.0700e-<br>003 | 3.0900e-<br>003 | 0.0321 | 8.0000e-<br>005 | 6.4700e-<br>003  | 6.0000e-<br>005 | 6.5200e-<br>003 | 1.7200e-<br>003   | 5.0000e-<br>005  | 1.7700e-<br>003 | 0.0000   | 5.8498    | 5.8498    | 3.1000e-<br>004 | 0.0000 | 5.8562 |
| Total    | 2.0700e-<br>003 | 3.0900e-<br>003 | 0.0321 | 8.0000e-<br>005 | 6.4700e-<br>003  | 6.0000e-<br>005 | 6.5200e-<br>003 | 1.7200e-<br>003   | 5.0000e-<br>005  | 1.7700e-<br>003 | 0.0000   | 5.8498    | 5.8498    | 3.1000e-<br>004 | 0.0000 | 5.8562 |

#### 3.5 Building Construction - 2018

**Unmitigated Construction On-Site** 

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |          |
| Off-Road | 0.3376 | 2.9425 | 2.2179 | 3.3900e-<br>003 |                  | 0.1890          | 0.1890        | <br>              | 0.1777           | 0.1777         | 0.0000   | 299.5136  | 299.5136  | 0.0733 | 0.0000 | 301.0529 |
| Total    | 0.3376 | 2.9425 | 2.2179 | 3.3900e-<br>003 |                  | 0.1890          | 0.1890        |                   | 0.1777           | 0.1777         | 0.0000   | 299.5136  | 299.5136  | 0.0733 | 0.0000 | 301.0529 |

# 3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | -/yr            |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Vendor   | 0.1296 | 1.2888 | 1.8161 | 3.6800e-<br>003 | 0.1033           | 0.0194          | 0.1226        | 0.0295            | 0.0178           | 0.0473         | 0.0000   | 324.1517  | 324.1517  | 2.4100e-<br>003 | 0.0000 | 324.2022 |
| Worker   | 0.2353 | 0.3512 | 3.6479 | 9.3400e-<br>003 | 0.7347           | 6.5800e-<br>003 | 0.7413        | 0.1951            | 6.0800e-<br>003  | 0.2012         | 0.0000   | 664.7437  | 664.7437  | 0.0349          | 0.0000 | 665.4773 |
| Total    | 0.3648 | 1.6400 | 5.4639 | 0.0130          | 0.8379           | 0.0260          | 0.8639        | 0.2246            | 0.0239           | 0.2485         | 0.0000   | 988.8954  | 988.8954  | 0.0373          | 0.0000 | 989.6795 |

#### **Mitigated Construction On-Site**

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.3376 | 2.9425 | 2.2179 | 3.3900e-<br>003 |                  | 0.1890          | 0.1890        |                   | 0.1777           | 0.1777         | 0.0000   | 299.5133  | 299.5133  | 0.0733 | 0.0000 | 301.0525 |
| Total    | 0.3376 | 2.9425 | 2.2179 | 3.3900e-<br>003 |                  | 0.1890          | 0.1890        |                   | 0.1777           | 0.1777         | 0.0000   | 299.5133  | 299.5133  | 0.0733 | 0.0000 | 301.0525 |

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#### 3.5 Building Construction - 2018

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Vendor   | 0.1296 | 1.2888 | 1.8161 | 3.6800e-<br>003 | 0.1033           | 0.0194          | 0.1226        | 0.0295            | 0.0178           | 0.0473         | 0.0000   | 324.1517  | 324.1517  | 2.4100e-<br>003 | 0.0000 | 324.2022 |
| Worker   | 0.2353 | 0.3512 | 3.6479 | 9.3400e-<br>003 | 0.7347           | 6.5800e-<br>003 | 0.7413        | 0.1951            | 6.0800e-<br>003  | 0.2012         | 0.0000   | 664.7437  | 664.7437  | 0.0349          | 0.0000 | 665.4773 |
| Total    | 0.3648 | 1.6400 | 5.4639 | 0.0130          | 0.8379           | 0.0260          | 0.8639        | 0.2246            | 0.0239           | 0.2485         | 0.0000   | 988.8954  | 988.8954  | 0.0373          | 0.0000 | 989.6795 |

#### 3.5 Building Construction - 2019

**Unmitigated Construction On-Site** 

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |          |
| Off-Road | 0.2164 | 1.9288 | 1.5751 | 2.4700e-<br>003 |                  | 0.1182          | 0.1182        |                   | 0.1112           | 0.1112         | 0.0000   | 215.3930  | 215.3930  | 0.0524 | 0.0000 | 216.4935 |
| Total    | 0.2164 | 1.9288 | 1.5751 | 2.4700e-<br>003 |                  | 0.1182          | 0.1182        |                   | 0.1112           | 0.1112         | 0.0000   | 215.3930  | 215.3930  | 0.0524 | 0.0000 | 216.4935 |

#### 3.5 Building Construction - 2019 Unmitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4              | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|------------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | <sup>-</sup> /yr |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000           | 0.0000 | 0.0000   |
| Vendor   | 0.0893 | 0.8643 | 1.2772 | 2.6600e-<br>003 | 0.0751           | 0.0134          | 0.0885        | 0.0214            | 0.0123           | 0.0338         | 0.0000   | 230.9073  | 230.9073  | 1.7100e-<br>003  | 0.0000 | 230.9433 |
| Worker   | 0.1569 | 0.2342 | 2.4308 | 6.7600e-<br>003 | 0.5343           | 4.6600e-<br>003 | 0.5390        | 0.1419            | 4.3200e-<br>003  | 0.1462         | 0.0000   | 464.4856  | 464.4856  | 0.0238           | 0.0000 | 464.9842 |
| Total    | 0.2462 | 1.0985 | 3.7080 | 9.4200e-<br>003 | 0.6094           | 0.0181          | 0.6275        | 0.1633            | 0.0167           | 0.1800         | 0.0000   | 695.3929  | 695.3929  | 0.0255           | 0.0000 | 695.9275 |

#### **Mitigated Construction On-Site**

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |          |
| Off-Road | 0.2164 | 1.9288 | 1.5751 | 2.4700e-<br>003 |                  | 0.1182          | 0.1182        |                   | 0.1112           | 0.1112         | 0.0000   | 215.3927  | 215.3927  | 0.0524 | 0.0000 | 216.4932 |
| Total    | 0.2164 | 1.9288 | 1.5751 | 2.4700e-<br>003 |                  | 0.1182          | 0.1182        |                   | 0.1112           | 0.1112         | 0.0000   | 215.3927  | 215.3927  | 0.0524 | 0.0000 | 216.4932 |

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#### 3.5 Building Construction - 2019 Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /уг             |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Vendor   | 0.0893 | 0.8643 | 1.2772 | 2.6600e-<br>003 | 0.0751           | 0.0134          | 0.0885        | 0.0214            | 0.0123           | 0.0338         | 0.0000   | 230.9073  | 230.9073  | 1.7100e-<br>003 | 0.0000 | 230.9433 |
| Worker   | 0.1569 | 0.2342 | 2.4308 | 6.7600e-<br>003 | 0.5343           | 4.6600e-<br>003 | 0.5390        | 0.1419            | 4.3200e-<br>003  | 0.1462         | 0.0000   | 464.4856  | 464.4856  | 0.0238          | 0.0000 | 464.9842 |
| Total    | 0.2462 | 1.0985 | 3.7080 | 9.4200e-<br>003 | 0.6094           | 0.0181          | 0.6275        | 0.1633            | 0.0167           | 0.1800         | 0.0000   | 695.3929  | 695.3929  | 0.0255          | 0.0000 | 695.9275 |

#### 3.6 Architectural Coating - 2019 <u>Unmitigated Construction On-Site</u>

|                 | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|-----------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category        |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr             |        |          |
| Archit. Coating | 2.4883 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Off-Road        | 0.1210 | 0.8333 | 0.8360 | 1.3500e-<br>003 | <br> <br> <br>   | 0.0585          | 0.0585        |                   | 0.0585           | 0.0585         | 0.0000   | 115.9177  | 115.9177  | 9.7900e-<br>003 | 0.0000 | 116.1233 |
| Total           | 2.6093 | 0.8333 | 0.8360 | 1.3500e-<br>003 |                  | 0.0585          | 0.0585        |                   | 0.0585           | 0.0585         | 0.0000   | 115.9177  | 115.9177  | 9.7900e-<br>003 | 0.0000 | 116.1233 |

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#### 3.6 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Worker   | 0.0387 | 0.0578 | 0.5998 | 1.6700e-<br>003 | 0.1318           | 1.1500e-<br>003 | 0.1330        | 0.0350            | 1.0700e-<br>003  | 0.0361         | 0.0000   | 114.6068  | 114.6068  | 5.8600e-<br>003 | 0.0000 | 114.7298 |
| Total    | 0.0387 | 0.0578 | 0.5998 | 1.6700e-<br>003 | 0.1318           | 1.1500e-<br>003 | 0.1330        | 0.0350            | 1.0700e-<br>003  | 0.0361         | 0.0000   | 114.6068  | 114.6068  | 5.8600e-<br>003 | 0.0000 | 114.7298 |

#### **Mitigated Construction On-Site**

|                 | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|-----------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category        |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |        |          |
| Archit. Coating | 2.4883 |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Off-Road        | 0.1210 | 0.8333 | 0.8360 | 1.3500e-<br>003 |                  | 0.0585          | 0.0585        |                   | 0.0585           | 0.0585         | 0.0000   | 115.9176  | 115.9176  | 9.7900e-<br>003 | 0.0000 | 116.1232 |
| Total           | 2.6093 | 0.8333 | 0.8360 | 1.3500e-<br>003 |                  | 0.0585          | 0.0585        |                   | 0.0585           | 0.0585         | 0.0000   | 115.9176  | 115.9176  | 9.7900e-<br>003 | 0.0000 | 116.1232 |

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#### 3.6 Architectural Coating - 2019 Mitigated Construction Off-Site

|          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e     |
|----------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|----------|
| Category |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /уг             |        |          |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000          | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000   |
| Worker   | 0.0387 | 0.0578 | 0.5998 | 1.6700e-<br>003 | 0.1318           | 1.1500e-<br>003 | 0.1330        | 0.0350            | 1.0700e-<br>003  | 0.0361         | 0.0000   | 114.6068  | 114.6068  | 5.8600e-<br>003 | 0.0000 | 114.7298 |
| Total    | 0.0387 | 0.0578 | 0.5998 | 1.6700e-<br>003 | 0.1318           | 1.1500e-<br>003 | 0.1330        | 0.0350            | 1.0700e-<br>003  | 0.0361         | 0.0000   | 114.6068  | 114.6068  | 5.8600e-<br>003 | 0.0000 | 114.7298 |

#### 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

|             | ROG    | NOx    | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------------|--------|--------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category    |        |        |         |        | ton              | s/yr            |               |                   |                  |                |          |                | MT             | /yr    |        |                |
| Mitigated   | 4.1846 | 9.8750 | 40.9930 | 0.1070 | 7.0008           | 0.1513          | 7.1521        | 1.8753            | 0.1395           | 2.0148         | 0.0000   | 7,539.672<br>5 | 7,539.672<br>5 | 0.2883 | 0.0000 | 7,545.726<br>5 |
| Unmitigated | 4.1846 | 9.8750 | 40.9930 | 0.1070 | 7.0008           | 0.1513          | 7.1521        | 1.8753            | 0.1395           | 2.0148         | 0.0000   | 7,539.672<br>5 | 7,539.672<br>5 | 0.2883 | 0.0000 | 7,545.726<br>5 |

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#### **4.2 Trip Summary Information**

|                                | Ave      | rage Daily Trip Ra | ate       | Unmitigated | Mitigated  |
|--------------------------------|----------|--------------------|-----------|-------------|------------|
| Land Use                       | Weekday  | Saturday           | Sunday    | Annual VMT  | Annual VMT |
| Apartments Mid Rise            | 2,899.60 | 3,150.40           | 2670.80   | 9,919,113   | 9,919,113  |
| Enclosed Parking with Elevator | 0.00     | 0.00               | 0.00      |             |            |
| Other Asphalt Surfaces         | 0.00     | 0.00               | 0.00      |             |            |
| Parking Lot                    | 0.00     | 0.00               | 0.00      |             |            |
| Regional Shopping Center       | 659.26   | 771.39             | 389.68    | 1,377,230   | 1,377,230  |
| Supermarket                    | 4,545.68 | 7,895.63           | 7400.02   | 7,167,378   | 7,167,378  |
| Total                          | 8,104.55 | 11,817.42          | 10,460.49 | 18,463,721  | 18,463,721 |

#### **4.3 Trip Type Information**

|                                |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted    | Pass-by |
| Apartments Mid Rise            | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86      | 11          | 3       |
| Enclosed Parking with Elevator | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Other Asphalt Surfaces         | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Parking Lot                    | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Regional Shopping Center       | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54      | 35          | 11      |
| Supermarket                    | 16.60      | 8.40       | 6.90        | 6.50       | 74.50      | 19.00       | 34      | 30          | 36      |

| LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.530094 | 0.057664 | 0.178835 | 0.124843 | 0.039181 | 0.006319 | 0.017052 | 0.034445 | 0.002509 | 0.003148 | 0.003693 | 0.000531 | 0.001685 |

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

Exceed Title 24

Install High Efficiency Lighting

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|                            | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4             | N2O             | CO2e           |
|----------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|-----------------|-----------------|----------------|
| Category                   |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |                | MT             | /yr             |                 |                |
| Electricity<br>Mitigated   |        |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 3,004.022<br>8 | 3,004.022<br>8 | 0.0710          | 0.0147          | 3,010.063<br>2 |
| Electricity<br>Unmitigated |        |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 3,293.327<br>7 | 3,293.327<br>7 | 0.0778          | 0.0161          | 3,299.949<br>9 |
| NaturalGas<br>Mitigated    | 0.0205 | 0.1784 | 0.0964 | 1.1200e-<br>003 |                  | 0.0142          | 0.0142        |                   | 0.0142           | 0.0142         | 0.0000   | 203.1246       | 203.1246       | 3.8900e-<br>003 | 3.7200e-<br>003 | 204.3608       |
| NaturalGas<br>Unmitigated  | 0.0229 | 0.1989 | 0.1067 | 1.2500e-<br>003 |                  | 0.0158          | 0.0158        |                   | 0.0158           | 0.0158         | 0.0000   | 226.6142       | 226.6142       | 4.3400e-<br>003 | 4.1500e-<br>003 | 227.9933       |

#### 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

|                                | NaturalGa<br>s Use | ROG             | NOx             | CO              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| Land Use                       | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |                 |          |
| Enclosed Parking with Elevator | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Parking Lot                    | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Regional<br>Shopping Center    | 27616.5            | 1.5000e-<br>004 | 1.3500e-<br>003 | 1.1400e-<br>003 | 1.0000e-<br>005 |                  | 1.0000e-<br>004 | 1.0000e-<br>004 |                   | 1.0000e-<br>004  | 1.0000e-<br>004 | 0.0000   | 1.4737    | 1.4737    | 3.0000e-<br>005 | 3.0000e-<br>005 | 1.4827   |
| Supermarket                    | 1.05721e<br>+006   | 5.7000e-<br>003 | 0.0518          | 0.0435          | 3.1000e-<br>004 |                  | 3.9400e-<br>003 | 3.9400e-<br>003 |                   | 3.9400e-<br>003  | 3.9400e-<br>003 | 0.0000   | 56.4169   | 56.4169   | 1.0800e-<br>003 | 1.0300e-<br>003 | 56.7602  |
| Apartments Mid<br>Rise         | 3.16176e<br>+006   | 0.0171          | 0.1457          | 0.0620          | 9.3000e-<br>004 |                  | 0.0118          | 0.0118          |                   | 0.0118           | 0.0118          | 0.0000   | 168.7236  | 168.7236  | 3.2300e-<br>003 | 3.0900e-<br>003 | 169.7504 |
| Total                          |                    | 0.0229          | 0.1989          | 0.1067          | 1.2500e-<br>003 |                  | 0.0158          | 0.0158          |                   | 0.0158           | 0.0158          | 0.0000   | 226.6142  | 226.6142  | 4.3400e-<br>003 | 4.1500e-<br>003 | 227.9933 |

# **5.2 Energy by Land Use - NaturalGas Mitigated**

|                                | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|--------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| Land Use                       | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |                 |          |
| Enclosed Parking with Elevator | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Parking Lot                    | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Regional<br>Shopping Center    | 24668              | 1.3000e-<br>004 | 1.2100e-<br>003 | 1.0200e-<br>003 | 1.0000e-<br>005 |                  | 9.0000e-<br>005 | 9.0000e-<br>005 |                   | 9.0000e-<br>005  | 9.0000e-<br>005 | 0.0000   | 1.3164    | 1.3164    | 3.0000e-<br>005 | 2.0000e-<br>005 | 1.3244   |
| Supermarket                    | 984555             | 5.3100e-<br>003 | 0.0483          | 0.0405          | 2.9000e-<br>004 |                  | 3.6700e-<br>003 | 3.6700e-<br>003 |                   | 3.6700e-<br>003  | 3.6700e-<br>003 | 0.0000   | 52.5396   | 52.5396   | 1.0100e-<br>003 | 9.6000e-<br>004 | 52.8594  |
| Apartments Mid<br>Rise         | 2.79719e<br>+006   | 0.0151          | 0.1289          | 0.0549          | 8.2000e-<br>004 |                  | 0.0104          | 0.0104          |                   | 0.0104           | 0.0104          | 0.0000   | 149.2686  | 149.2686  | 2.8600e-<br>003 | 2.7400e-<br>003 | 150.1771 |
| Total                          |                    | 0.0205          | 0.1784          | 0.0964          | 1.1200e-<br>003 |                  | 0.0142          | 0.0142          |                   | 0.0142           | 0.0142          | 0.0000   | 203.1246  | 203.1246  | 3.9000e-<br>003 | 3.7200e-<br>003 | 204.3608 |

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#### 5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

|                                | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--------------------------------|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                       | kWh/yr             |                | МТ              | -/yr            |                |
| Apartments Mid<br>Rise         | 1.56746e<br>+006   | 873.0176       | 0.0206          | 4.2700e-<br>003 | 874.7730       |
| Enclosed Parking with Elevator | 2.2269e<br>+006    | 1,240.295<br>4 | 0.0293          | 6.0600e-<br>003 | 1,242.789<br>4 |
| Parking Lot                    | 39072              | 21.7616        | 5.1000e-<br>004 | 1.1000e-<br>004 | 21.8054        |
| Regional<br>Shopping Center    | 246437             | 137.2557       | 3.2400e-<br>003 | 6.7000e-<br>004 | 137.5317       |
| Supermarket                    | 1.83316e<br>+006   | 1,020.997<br>4 | 0.0241          | 4.9900e-<br>003 | 1,023.050<br>4 |
| Total                          |                    | 3,293.327<br>7 | 0.0778          | 0.0161          | 3,299.949<br>9 |

#### 5.3 Energy by Land Use - Electricity Mitigated

|                                | Electricity<br>Use | Total CO2      | CH4             | N2O             | CO2e           |
|--------------------------------|--------------------|----------------|-----------------|-----------------|----------------|
| Land Use                       | kWh/yr             |                | МТ              | -/yr            |                |
| Apartments Mid<br>Rise         | 1.5009e<br>+006    | 835.9435       | 0.0197          | 4.0800e-<br>003 | 837.6244       |
| Enclosed Parking with Elevator | 1.90228e<br>+006   | 1,059.495<br>7 | 0.0250          | 5.1800e-<br>003 | 1,061.626<br>1 |
| Parking Lot                    | 33211.2            | 18.4974        | 4.4000e-<br>004 | 9.0000e-<br>005 | 18.5346        |
| Regional<br>Shopping Center    | 217342             | 121.0511       | 2.8600e-<br>003 | 5.9000e-<br>004 | 121.2945       |
| Supermarket                    | 1.73986e<br>+006   | 969.0352       | 0.0229          | 4.7400e-<br>003 | 970.9837       |
| Total                          |                    | 3,004.022<br>8 | 0.0710          | 0.0147          | 3,010.063<br>2 |

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

|             | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category    |        |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |        |        |
| Mitigated   | 3.5608 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                   | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003 | 0.0000 | 7.5900 |
| Unmitigated | 3.5608 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                   | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003 | 0.0000 | 7.5900 |

#### 6.2 Area by SubCategory

#### **Unmitigated**

|                          | ROG    | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5        | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|--------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|--------------------------|------------------|----------------|----------|-----------|-----------|-----------------|--------|--------|
| SubCategory              |        |        |        |                 | ton              | s/yr            |               |                          |                  |                |          |           | МТ        | /yr             |        |        |
| Architectural<br>Coating | 0.2488 |        |        | <br>            |                  | 0.0000          | 0.0000        | <br>                     | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Consumer<br>Products     | 3.1721 | <br>   |        | <br>            |                  | 0.0000          | 0.0000        | 1<br>1<br>1<br>1         | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Hearth                   | 0.0000 | 0.0000 | 0.0000 | 0.0000          |                  | 0.0000          | 0.0000        | <br> <br> <br> <br> <br> | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000 | 0.0000 |
| Landscaping              | 0.1398 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        | <br>                     | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003 | 0.0000 | 7.5900 |
| Total                    | 3.5608 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                          | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003 | 0.0000 | 7.5900 |

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#### 6.2 Area by SubCategory

#### **Mitigated**

|                          | ROG    | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5    | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4              | N2O    | CO2e   |
|--------------------------|--------|--------|--------|-----------------|------------------|-----------------|---------------|----------------------|------------------|----------------|----------|-----------|-----------|------------------|--------|--------|
| SubCategory              |        |        |        |                 | ton              | s/yr            |               |                      |                  |                |          |           | MT        | <sup>7</sup> /yr |        |        |
| Architectural<br>Coating | 0.2488 |        |        |                 |                  | 0.0000          | 0.0000        | <br>                 | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000           | 0.0000 | 0.0000 |
| Consumer<br>Products     | 3.1721 |        | i      |                 |                  | 0.0000          | 0.0000        | <br>                 | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000           | 0.0000 | 0.0000 |
| Hearth                   | 0.0000 | 0.0000 | 0.0000 | 0.0000          |                  | 0.0000          | 0.0000        | <br>                 | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000           | 0.0000 | 0.0000 |
| Landscaping              | 0.1398 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        | 1<br> <br> <br> <br> | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003  | 0.0000 | 7.5900 |
| Total                    | 3.5608 | 0.0528 | 4.5655 | 2.4000e-<br>004 |                  | 0.0251          | 0.0251        |                      | 0.0251           | 0.0251         | 0.0000   | 7.4369    | 7.4369    | 7.2900e-<br>003  | 0.0000 | 7.5900 |

#### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

Use Grey Water
Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower

|          | Total CO2 | CH4    | N2O    | CO2e     |
|----------|-----------|--------|--------|----------|
| Category |           | МТ     | 7/yr   |          |
|          | 215.8226  | 0.9338 | 0.0229 | 242.5351 |
|          | 270.8823  | 1.1675 | 0.0287 | 304.2932 |

#### 7.2 Water by Land Use <u>Unmitigated</u>

|                                | Indoor/<br>Outdoor<br>Use | Total CO2 | CH4    | N2O             | CO2e     |
|--------------------------------|---------------------------|-----------|--------|-----------------|----------|
| Land Use                       | Mgal                      |           | МТ     | √yr             |          |
| Apartments Mid<br>Rise         | 28.6678 /<br>0            | 216.9993  | 0.9391 | 0.0231          | 243.8719 |
| Enclosed Parking with Elevator | 0/0                       | 0.0000    | 0.0000 | 0.0000          | 0.0000   |
| Other Asphalt<br>Surfaces      | 0/0                       | 0.0000    | 0.0000 | 0.0000          | 0.0000   |
| Parking Lot                    | 0/0                       | 0.0000    | 0.0000 | 0.0000          | 0.0000   |
| Regional<br>Shopping Center    | 1.20368 /<br>0            | 9.1112    | 0.0394 | 9.7000e-<br>004 | 10.2395  |
| Supermarket                    | 5.76895 /<br>0.178421     | 44.7718   | 0.1890 | 4.6500e-<br>003 | 50.1818  |
| Total                          |                           | 270.8823  | 1.1675 | 0.0287          | 304.2932 |

#### 7.2 Water by Land Use

#### **Mitigated**

|                                | Indoor/<br>Outdoor<br>Use | Total CO2 | CH4    | N2O              | CO2e     |
|--------------------------------|---------------------------|-----------|--------|------------------|----------|
| Land Use                       | Mgal                      |           | МТ     | <sup>⊤</sup> /yr |          |
| Apartments Mid<br>Rise         | 22.9342 /<br>0            | 173.5994  | 0.7511 | 0.0184           | 195.0859 |
| Enclosed Parking with Elevator | 0/0                       | 0.0000    | 0.0000 | 0.0000           | 0.0000   |
| Other Asphalt<br>Surfaces      | 0/0                       | 0.0000    | 0.0000 | 0.0000           | 0.0000   |
| Parking Lot                    | 0/0                       | 0.0000    | 0.0000 | 0.0000           | 0.0000   |
| Regional<br>Shopping Center    | 0.962943 /<br>0           | 7.2890    | 0.0315 | 7.7000e-<br>004  | 8.1911   |
| Supermarket                    | 4.61516 /<br>0            | 34.9342   | 0.1512 | 3.7100e-<br>003  | 39.2581  |
| Total                          |                           | 215.8226  | 0.9338 | 0.0229           | 242.5351 |

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

#### Category/Year

|            | Total CO2 | CH4    | N2O    | CO2e     |
|------------|-----------|--------|--------|----------|
|            |           | МТ     | √yr    |          |
| willigated | 49.0639   | 2.8996 | 0.0000 | 109.9554 |
| Ommagatod  | 98.1279   | 5.7992 | 0.0000 | 219.9109 |

#### 8.2 Waste by Land Use <u>Unmitigated</u>

|                                | Waste<br>Disposed | Total CO2 | CH4    | N2O    | CO2e     |
|--------------------------------|-------------------|-----------|--------|--------|----------|
| Land Use                       | tons              |           | МТ     | -/yr   |          |
| Apartments Mid<br>Rise         | 202.4             | 41.0854   | 2.4281 | 0.0000 | 92.0750  |
| Enclosed Parking with Elevator | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Other Asphalt<br>Surfaces      | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Parking Lot                    | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Regional<br>Shopping Center    | 17.06             | 3.4630    | 0.2047 | 0.0000 | 7.7609   |
| Supermarket                    | 263.95            | 53.5795   | 3.1665 | 0.0000 | 120.0750 |
| Total                          |                   | 98.1279   | 5.7992 | 0.0000 | 219.9109 |

#### 8.2 Waste by Land Use

#### **Mitigated**

|                                | Waste<br>Disposed | Total CO2 | CH4    | N2O    | CO2e     |
|--------------------------------|-------------------|-----------|--------|--------|----------|
| Land Use                       | tons              |           | MT     | /yr    |          |
| Apartments Mid<br>Rise         | 101.2             | 20.5427   | 1.2140 | 0.0000 | 46.0375  |
| Enclosed Parking with Elevator | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Other Asphalt<br>Surfaces      | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Parking Lot                    | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Regional<br>Shopping Center    | 8.53              | 1.7315    | 0.1023 | 0.0000 | 3.8804   |
| Supermarket                    | 131.975           | 26.7897   | 1.5832 | 0.0000 | 60.0375  |
| Total                          |                   | 49.0639   | 2.8996 | 0.0000 | 109.9554 |

#### 9.0 Operational Offroad

| Equipment Type Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|-----------------------|-----------|-----------|-------------|-------------|-----------|
|-----------------------|-----------|-----------|-------------|-------------|-----------|

## 10.0 Vegetation

|          | Total CO2 | CH4    | N2O    | CO2e     |
|----------|-----------|--------|--------|----------|
| Category |           | M      | ΙΤ     |          |
|          | 203.1960  | 0.0000 | 0.0000 | 203.1960 |

10.2 Net New Trees
Species Class

|               | Number of<br>Trees | Total CO2 | CH4    | N2O    | CO2e     |
|---------------|--------------------|-----------|--------|--------|----------|
|               |                    |           | M      | Т      |          |
| Miscellaneous | :                  | 203.1960  | 0.0000 | 0.0000 | 203.1960 |
| Total         |                    | 203.1960  | 0.0000 | 0.0000 | 203.1960 |

# APPENDIX B EXISTING SITE LAND USES EMISSIONS CALCULATION DATA

La Veranda B

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#### **Woodley & SF Mission - Existing Uses**

#### Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

| Land Uses                           | Size  | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|-------|----------|-------------|--------------------|------------|
| Government Office Building          | 35.00 | 1000sqft | 0.80        | 35,000.00          | 0          |
| Medical Office Building             | 6.20  | 1000sqft | 0.14        | 6,200.00           | 0          |
| High Turnover (Sit Down Restaurant) | 12.41 | 1000sqft | 0.28        | 12,410.00          | 0          |
| Fast Food Restaurant w/o Drive Thru | 1.25  | 1000sqft | 0.03        | 1,250.00           | 0          |
| Regional Shopping Center            | 19.26 | 1000sqft | 0.44        | 19,257.00          | 0          |
| Place of Worship                    | 1.27  | 1000sqft | 0.03        | 1,274.00           | 0          |
| Parking Lot                         | 6.23  | Acre     | 6.23        | 271,378.80         | 0          |

#### 1.2 Other Project Characteristics

| Urbanization               | Urban                    | Wind Speed (m/s)           | 2.2   | Precipitation Freq (Days)  | 33    |
|----------------------------|--------------------------|----------------------------|-------|----------------------------|-------|
| Climate Zone               | 12                       |                            |       | Operational Year           | 2016  |
| Utility Company            | Martines Cogen Ltd. Part | nership                    |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 945.27                   | CH4 Intensity<br>(lb/MWhr) | 0.029 | N2O Intensity<br>(lb/MWhr) | 0.006 |

#### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use -

Construction Phase - Demolition and construction are not evaluated for the existing use scenario.

Off-road Equipment - Demolition and construction are not evaluated for the existing use scenario.

Vehicle Trips - Default trip rates have been revised to be consistent with the Technical Traffic Evaluation prepared for the proposed project. Includes the 10% reduction for internal trips for some uses.

Area Coating - SCAQMD Rule 1113 limits paints to a maximum VOC content of 50 g/L.

Water And Wastewater - Assumes no outdoor water use due to minimal landscaping.

Sequestration - Assumes 33 existing trees at the site.

Waste Mitigation - Assumes a solid waste reduction of at least 50% per current city recycling requirements.

Land Use Change -

| Table Name                | Column Name                                   | Default Value | New Value |
|---------------------------|---|---------------|-----------|
| tblAreaCoating            | Area_EF_Nonresidential_Exterior               | 250           | 50        |
| tblAreaCoating            | Area_EF_Nonresidential_Interior               | 250           | 50        |
| tblAreaCoating            | Area_EF_Residential_Exterior                  | 100           | 50        |
| tblAreaMitigation         | UseLowVOCPaintNonresidentialExteriorV<br>alue | 50            | 250       |
| tblConstructionPhase      | NumDays                                       | 20.00         | 1.00      |
| tblOffRoadEquipment       | OffRoadEquipmentUnitAmount                    | 1.00          | 0.00      |
| tblProjectCharacteristics | OperationalYear                               | 2014          | 2016      |
| tblSequestration          | NumberOfNewTrees                              | 0.00          | 33.00     |
| tblTripsAndVMT            | WorkerTripNumber                              | 13.00         | 0.00      |
| tblVehicleTrips           | DV_TP   | 37.00         | 25.00     |
| tblVehicleTrips           | DV_TP   | 20.00         | 40.00     |
| tblVehicleTrips           | DV_TP   | 35.00         | 15.00     |
| tblVehicleTrips           | PB_TP   | 12.00         | 50.00     |
| tblVehicleTrips           | PB_TP   | 43.00         | 10.00     |
| tblVehicleTrips           | PB_TP   | 11.00         | 40.00     |
| tblVehicleTrips           | PR_TP   | 51.00         | 25.00     |

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| tblVehicleTrips | PR_TP               | 37.00        | 50.00  |
|-----------------|---------------------|--------------|--------|
| tblVehicleTrips | PR_TP               | 54.00        | 45.00  |
| tblVehicleTrips | ST_TR               | 696.00       | 446.51 |
| tblVehicleTrips | ST_TR               | 158.37       | 142.53 |
| tblVehicleTrips | ST_TR               | 8.96         | 8.06   |
| tblVehicleTrips | ST_TR               | 49.97        | 44.97  |
| tblVehicleTrips | SU_TR               | 500.00       | 446.51 |
| tblVehicleTrips | SU_TR               | 131.84       | 118.66 |
| tblVehicleTrips | SU_TR               | 1.55         | 1.40   |
| tblVehicleTrips | SU_TR               | 25.24        | 22.72  |
| tblVehicleTrips | WD_TR               | 716.00       | 446.51 |
| tblVehicleTrips | WD_TR               | 68.93        | 166.02 |
| tblVehicleTrips | WD_TR               | 127.15       | 114.44 |
| tblVehicleTrips | WD_TR               | 36.13        | 32.52  |
| tblVehicleTrips | WD_TR               | 42.94        | 38.43  |
| tblWater        | OutdoorWaterUseRate | 24,218.12    | 0.00   |
| tblWater        | OutdoorWaterUseRate | 4,261,570.68 | 0.00   |
| tblWater        | OutdoorWaterUseRate | 240,437.45   | 0.00   |
| tblWater        | OutdoorWaterUseRate | 148,186.54   | 0.00   |
| tblWater        | OutdoorWaterUseRate | 62,152.61    | 0.00   |
| tblWater        | OutdoorWaterUseRate | 874,390.27   | 0.00   |
|                 |                     |              |        |

## 2.0 Emissions Summary

#### 2.1 Overall Construction

#### **Unmitigated Construction**

|       | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Year  |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | √yr             |        |        |
| 2017  | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 | 0.0000           | 9.1000e-<br>004 | 9.1000e-<br>004 | 0.0000            | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |
| Total | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 | 0.0000           | 9.1000e-<br>004 | 9.1000e-<br>004 | 0.0000            | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |

#### **Mitigated Construction**

|       | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|-------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Year  |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | МТ        | -/yr            |        |        |
| 2017  | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 | 0.0000           | 9.1000e-<br>004 | 9.1000e-<br>004 | 0.0000            | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |
| Total | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 | 0.0000           | 9.1000e-<br>004 | 9.1000e-<br>004 | 0.0000            | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |

|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00             | 0.00            | 0.00          | 0.00              | 0.00             | 0.00           | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

### 2.2 Overall Operational

#### **Unmitigated Operational**

|          | ROG    | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O             | CO2e            |
|----------|--------|-----------------|-----------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Category |        |                 |                 |                 | ton              | s/yr            |               |                   |                  |                |          |                 | MT              | /yr             |                 |                 |
| Area     | 1.2725 | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000          |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000          | 2.1500e-<br>003 |
| Energy   | 0.0199 | 0.1809          | 0.1519          | 1.0900e-<br>003 |                  | 0.0138          | 0.0138        |                   | 0.0138           | 0.0138         | 0.0000   | 962.5673        | 962.5673        | 0.0273          | 8.4700e-<br>003 | 965.7655        |
| Mobile   | 4.3155 | 10.4658         | 43.0062         | 0.0853          | 5.6064           | 0.1369          | 5.7433        | 1.5014            | 0.1258           | 1.6273         | 0.0000   | 6,823.250<br>2  | 6,823.250<br>2  | 0.3016          | 0.0000          | 6,829.583<br>6  |
| Waste    |        |                 |                 |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 58.6745  | 0.0000          | 58.6745         | 3.4676          | 0.0000          | 131.4934        |
| Water    |        |                 |                 |                 |                  | 0.0000          | 0.0000        | <del></del>       | 0.0000           | 0.0000         | 4.2333   | 74.4977         | 78.7310         | 0.4371          | 0.0107          | 91.2392         |
| Total    | 5.6079 | 10.6467         | 43.1592         | 0.0864          | 5.6064           | 0.1506          | 5.7570        | 1.5014            | 0.1396           | 1.6410         | 62.9079  | 7,860.317<br>2  | 7,923.225<br>1  | 4.2335          | 0.0192          | 8,018.083<br>9  |

#### 2.2 Overall Operational

#### **Mitigated Operational**

|          | ROG    | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O             | CO2e            |
|----------|--------|-----------------|-----------------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Category |        |                 |                 |                 | ton              | s/yr            |               |                   |                  |                |          |                 | MT              | /yr             |                 |                 |
| Area     | 1.2725 | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000          |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000          | 2.1500e-<br>003 |
| Energy   | 0.0199 | 0.1809          | 0.1519          | 1.0900e-<br>003 |                  | 0.0138          | 0.0138        |                   | 0.0138           | 0.0138         | 0.0000   | 962.5673        | 962.5673        | 0.0273          | 8.4700e-<br>003 | 965.7655        |
| Mobile   | 4.3155 | 10.4658         | 43.0062         | 0.0853          | 5.6064           | 0.1369          | 5.7433        | 1.5014            | 0.1258           | 1.6273         | 0.0000   | 6,823.250<br>2  | 6,823.250<br>2  | 0.3016          | 0.0000          | 6,829.583<br>6  |
| Waste    |        |                 | 1<br>1<br>1     |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 29.3373  | 0.0000          | 29.3373         | 1.7338          | 0.0000          | 65.7467         |
| Water    | ,,     |                 | 1               |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 4.2333   | 74.4977         | 78.7310         | 0.4370          | 0.0107          | 91.2324         |
| Total    | 5.6079 | 10.6467         | 43.1592         | 0.0864          | 5.6064           | 0.1506          | 5.7570        | 1.5014            | 0.1396           | 1.6410         | 33.5706  | 7,860.317<br>2  | 7,893.887<br>9  | 2.4997          | 0.0192          | 7,952.330<br>4  |

|                      | ROG  | NOx  | СО   | SO2  | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4   | N20  | CO2e |
|----------------------|------|------|------|------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------|-----------|-------|------|------|
| Percent<br>Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00             | 0.00            | 0.00          | 0.00              | 0.00             | 0.00           | 46.64    | 0.00     | 0.37      | 40.96 | 0.10 | 0.82 |

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#### 2.3 Vegetation

#### **Vegetation**

|           | CO2e    |
|-----------|---------|
| Category  | MT      |
| New Trees | 23.3640 |
| Total     | 23.3640 |

#### 3.0 Construction Detail

#### **Construction Phase**

| Pha<br>Num |            | Phase Type | Start Date | End Date | Num Days<br>Week | Num Days | Phase Description |
|------------|------------|------------|------------|----------|------------------|----------|-------------------|
| 1          | Demolition | Demolition | 1/1/2017   | 1/2/2017 | 5                | 1        |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

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| Phase Name | Offroad Equipment Type   | Amount | Usage Hours | Horse Power | Load Factor |
|------------|--------------------------|--------|-------------|-------------|-------------|
| Demolition | Excavators               | 3      | 8.00        | 162         | 0.38        |
| Demolition | Rubber Tired Dozers      | 2      | 8.00        | 255         | 0.40        |
| Demolition | Concrete/Industrial Saws | 0      | 8.00        | 81          | 0.73        |

#### **Trips and VMT**

| Phase Name | Offroad Equipment | Worker Trip | Vendor Trip | Hauling Trip | Worker Trip | Vendor Trip | Hauling Trip | Worker Vehicle | Vendor        | Hauling       |
|------------|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|----------------|---------------|---------------|
|            | Count             | Number      | Number      | Number       | Length      | Length      | Length       | Class          | Vehicle Class | Vehicle Class |
| Demolition | 5                 | 0.00        | 0.00        | 0.00         | 14.70       | 6.90        | 20.00        | LD_Mix         | HDT_Mix       | HHDT          |

#### **3.1 Mitigation Measures Construction**

#### 3.2 **Demolition - 2017**

**Unmitigated Construction On-Site** 

|          | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|----------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| On rioda | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 |                  | 9.1000e-<br>004 | 9.1000e-<br>004 |                   | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |
| Total    | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 |                  | 9.1000e-<br>004 | 9.1000e-<br>004 |                   | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |

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# 3.2 Demolition - 2017 <u>Unmitigated Construction Off-Site</u>

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|--------|
| Category |        |        |        |        | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr    |        |        |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total    | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

#### **Mitigated Construction On-Site**

|            | ROG             | NOx    | CO     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O    | CO2e   |
|------------|-----------------|--------|--------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|--------|--------|
| Category   |                 |        |        |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |        |        |
| J On House | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 |                  | 9.1000e-<br>004 | 9.1000e-<br>004 |                   | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |
| Total      | 1.7300e-<br>003 | 0.0192 | 0.0151 | 2.0000e-<br>005 |                  | 9.1000e-<br>004 | 9.1000e-<br>004 |                   | 8.4000e-<br>004  | 8.4000e-<br>004 | 0.0000   | 1.5621    | 1.5621    | 4.8000e-<br>004 | 0.0000 | 1.5721 |

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# 3.2 Demolition - 2017

#### **Mitigated Construction Off-Site**

|          | ROG    | NOx    | СО     | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|----------|--------|--------|--------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|--------|--------|--------|
| Category |        |        |        |        | ton              | s/yr            |               |                   |                  |                |          |           | MT        | /yr    |        |        |
| Hauling  | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Worker   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total    | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000           | 0.0000          | 0.0000        | 0.0000            | 0.0000           | 0.0000         | 0.0000   | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

|             | ROG    | NOx     | CO      | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|-------------|--------|---------|---------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|----------------|----------------|--------|--------|----------------|
| Category    |        |         |         |        | ton              | s/yr            |               |                   |                  |                |          |                | MT             | /yr    |        |                |
| Unmitigated | 4.3155 | 10.4658 | 43.0062 | 0.0853 | 5.6064           | 0.1369          | 5.7433        | 1.5014            | 0.1258           | 1.6273         | 0.0000   | 6,823.250<br>2 | 6,823.250<br>2 | 0.3016 | 0.0000 | 6,829.583<br>6 |
| Mitigated   | 4.3155 | 10.4658 | 43.0062 | 0.0853 | 5.6064           | 0.1369          | 5.7433        | 1.5014            | 0.1258           | 1.6273         | 0.0000   | 6,823.250<br>2 | 6,823.250<br>2 | 0.3016 | 0.0000 | 6,829.583<br>6 |

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#### **4.2 Trip Summary Information**

|                                     | Avei     | rage Daily Trip Ra | ite      | Unmitigated | Mitigated  |
|-------------------------------------|----------|--------------------|----------|-------------|------------|
| Land Use                            | Weekday  | Saturday           | Sunday   | Annual VMT  | Annual VMT |
| Fast Food Restaurant w/o Drive Thru | 558.14   | 558.14             | 558.14   | 533,173     | 533,173    |
| Government Office Building          | 5,810.70 | 0.00               | 0.00     | 9,773,453   | 9,773,453  |
| High Turnover (Sit Down Restaurant) | 1,420.20 | 1,768.80           | 1472.57  | 2,848,851   | 2,848,851  |
| Medical Office Building             | 201.62   | 49.97              | 8.68     | 395,294     | 395,294    |
| Parking Lot                         | 0.00     | 0.00               | 0.00     |             |            |
| Place of Worship                    | 11.61    | 13.21              | 46.67    | 35,925      | 35,925     |
| Regional Shopping Center            | 740.05   | 865.99             | 437.52   | 1,209,294   | 1,209,294  |
| Total                               | 8,742.31 | 3,256.11           | 2,523.57 | 14,795,990  | 14,795,990 |

#### 4.3 Trip Type Information

|                                |            | Miles      |             |            | Trip %     |             |         | Trip Purpos | e %     |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|---------|-------------|---------|
| Land Use                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted    | Pass-by |
| Fast Food Restaurant w/o Drive | 16.60      | 8.40       | 6.90        | 1.50       | 79.50      | 19.00       | 25      | 25          | 50      |
| Government Office Building     | 16.60      | 8.40       | 6.90        | 33.00      | 62.00      | 5.00        | 50      | 34          | 16      |
| High Turnover (Sit Down        | 16.60      | 8.40       | 6.90        | 8.50       | 72.50      | 19.00       | 50      | 40          | 10      |
| Medical Office Building        | 16.60      | 8.40       | 6.90        | 29.60      | 51.40      | 19.00       | 60      | 30          | 10      |
| Parking Lot                    | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0       | 0           | 0       |
| Place of Worship               | 16.60      | 8.40       | 6.90        | 0.00       | 95.00      | 5.00        | 64      | 25          | 11      |
| Regional Shopping Center       | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 45      | 15          | 40      |

| LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.533598 | 0.058434 | 0.178244 | 0.125508 | 0.038944 | 0.006283 | 0.016425 | 0.031066 | 0.002453 | 0.003157 | 0.003691 | 0.000543 | 0.001655 |

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

|                            | ROG                  | NOx    | СО     | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|----------------------------|----------------------|--------|--------|-----------------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| Category                   |                      |        |        |                 | ton              | s/yr            |               |                   |                  |                |          |           | МТ        | /yr             |                 |          |
| Electricity<br>Mitigated   |                      |        |        |                 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 765.6584  | 765.6584  | 0.0235          | 4.8600e-<br>003 | 767.6583 |
| Electricity<br>Unmitigated | 61<br>61<br>61<br>61 |        |        | 1               |                  | 0.0000          | 0.0000        | ,                 | 0.0000           | 0.0000         | 0.0000   | 765.6584  | 765.6584  | 0.0235          | 4.8600e-<br>003 | 767.6583 |
| NaturalGas<br>Mitigated    | 0.0199               | 0.1809 | 0.1519 | 1.0900e-<br>003 |                  | 0.0138          | 0.0138        | ,                 | 0.0138           | 0.0138         | 0.0000   | 196.9089  | 196.9089  | 3.7700e-<br>003 | 3.6100e-<br>003 | 198.1073 |
| NaturalGas<br>Unmitigated  | 0.0199               | 0.1809 | 0.1519 | 1.0900e-<br>003 |                  | 0.0138          | 0.0138        | <br>:<br>:<br>:   | 0.0138           | 0.0138         | 0.0000   | 196.9089  | 196.9089  | 3.7700e-<br>003 | 3.6100e-<br>003 | 198.1073 |

#### 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

|                                     | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10    | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|-------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|---------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| Land Use                            | kBTU/yr            |                 |                 |                 |                 | ton                 | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |                 |          |
| Government<br>Office Building       | 382550             | 2.0600e-<br>003 | 0.0188          | 0.0158          | 1.1000e-<br>004 |                     | 1.4300e-<br>003 | 1.4300e-<br>003 | <br>              | 1.4300e-<br>003  | 1.4300e-<br>003 | 0.0000   | 20.4143   | 20.4143   | 3.9000e-<br>004 | 3.7000e-<br>004 | 20.5386  |
| High Turnover (Sit Down Restaurant) |                    | 0.0156          | 0.1418          | 0.1191          | 8.5000e-<br>004 |                     | 0.0108          | 0.0108          | <br>              | 0.0108           | 0.0108          | 0.0000   | 154.3097  | 154.3097  | 2.9600e-<br>003 | 2.8300e-<br>003 | 155.2488 |
| Medical Office<br>Building          | 67766              | 3.7000e-<br>004 | 3.3200e-<br>003 | 2.7900e-<br>003 | 2.0000e-<br>005 | <br> <br> <br> <br> | 2.5000e-<br>004 | 2.5000e-<br>004 | <br>              | 2.5000e-<br>004  | 2.5000e-<br>004 | 0.0000   | 3.6163    | 3.6163    | 7.0000e-<br>005 | 7.0000e-<br>005 | 3.6383   |
| Parking Lot                         | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          | <br> <br> <br> <br> | 0.0000          | 0.0000          | <br>              | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Place of Worship                    | 23963.9            | 1.3000e-<br>004 | 1.1700e-<br>003 | 9.9000e-<br>004 | 1.0000e-<br>005 |                     | 9.0000e-<br>005 | 9.0000e-<br>005 | ,                 | 9.0000e-<br>005  | 9.0000e-<br>005 | 0.0000   | 1.2788    | 1.2788    | 2.0000e-<br>005 | 2.0000e-<br>005 | 1.2866   |
| Regional<br>Shopping Center         | 32736.9            | 1.8000e-<br>004 | 1.6000e-<br>003 | 1.3500e-<br>003 | 1.0000e-<br>005 | <br> <br> <br> <br> | 1.2000e-<br>004 | 1.2000e-<br>004 | <br>              | 1.2000e-<br>004  | 1.2000e-<br>004 | 0.0000   | 1.7470    | 1.7470    | 3.0000e-<br>005 | 3.0000e-<br>005 | 1.7576   |
| Fast Food<br>Restaurant w/o         | 291263             | 1.5700e-<br>003 | 0.0143          | 0.0120          | 9.0000e-<br>005 | <br> <br> <br> <br> | 1.0900e-<br>003 | 1.0900e-<br>003 | <br>              | 1.0900e-<br>003  | 1.0900e-<br>003 | 0.0000   | 15.5429   | 15.5429   | 3.0000e-<br>004 | 2.8000e-<br>004 | 15.6375  |
| Total                               |                    | 0.0199          | 0.1809          | 0.1519          | 1.0900e-<br>003 |                     | 0.0138          | 0.0138          |                   | 0.0138           | 0.0138          | 0.0000   | 196.9089  | 196.9089  | 3.7700e-<br>003 | 3.6000e-<br>003 | 198.1073 |

# **5.2 Energy by Land Use - NaturalGas Mitigated**

|                                     | NaturalGa<br>s Use | ROG             | NOx             | СО              | SO2             | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2 | NBio- CO2 | Total CO2 | CH4             | N2O             | CO2e     |
|-------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|----------|-----------|-----------|-----------------|-----------------|----------|
| Land Use                            | kBTU/yr            |                 |                 |                 |                 | ton              | s/yr            |                 |                   |                  |                 |          |           | MT        | /yr             |                 |          |
| High Turnover (Sit Down Restaurant) |                    | 0.0156          | 0.1418          | 0.1191          | 8.5000e-<br>004 |                  | 0.0108          | 0.0108          |                   | 0.0108           | 0.0108          | 0.0000   | 154.3097  | 154.3097  | 2.9600e-<br>003 | 2.8300e-<br>003 | 155.2488 |
| Medical Office<br>Building          | 67766              | 3.7000e-<br>004 | 3.3200e-<br>003 | 2.7900e-<br>003 | 2.0000e-<br>005 |                  | 2.5000e-<br>004 | 2.5000e-<br>004 |                   | 2.5000e-<br>004  | 2.5000e-<br>004 | 0.0000   | 3.6163    | 3.6163    | 7.0000e-<br>005 | 7.0000e-<br>005 | 3.6383   |
| Parking Lot                         | 0                  | 0.0000          | 0.0000          | 0.0000          | 0.0000          |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000   | 0.0000    | 0.0000    | 0.0000          | 0.0000          | 0.0000   |
| Place of Worship                    | 23963.9            | 1.3000e-<br>004 | 1.1700e-<br>003 | 9.9000e-<br>004 | 1.0000e-<br>005 |                  | 9.0000e-<br>005 | 9.0000e-<br>005 |                   | 9.0000e-<br>005  | 9.0000e-<br>005 | 0.0000   | 1.2788    | 1.2788    | 2.0000e-<br>005 | 2.0000e-<br>005 | 1.2866   |
| Regional<br>Shopping Center         | 32736.9            | 1.8000e-<br>004 | 1.6000e-<br>003 | 1.3500e-<br>003 | 1.0000e-<br>005 |                  | 1.2000e-<br>004 | 1.2000e-<br>004 |                   | 1.2000e-<br>004  | 1.2000e-<br>004 | 0.0000   | 1.7470    | 1.7470    | 3.0000e-<br>005 | 3.0000e-<br>005 | 1.7576   |
| Fast Food<br>Restaurant w/o         | 291263             | 1.5700e-<br>003 | 0.0143          | 0.0120          | 9.0000e-<br>005 |                  | 1.0900e-<br>003 | 1.0900e-<br>003 |                   | 1.0900e-<br>003  | 1.0900e-<br>003 | 0.0000   | 15.5429   | 15.5429   | 3.0000e-<br>004 | 2.8000e-<br>004 | 15.6375  |
| Government<br>Office Building       | 382550             | 2.0600e-<br>003 | 0.0188          | 0.0158          | 1.1000e-<br>004 |                  | 1.4300e-<br>003 | 1.4300e-<br>003 |                   | 1.4300e-<br>003  | 1.4300e-<br>003 | 0.0000   | 20.4143   | 20.4143   | 3.9000e-<br>004 | 3.7000e-<br>004 | 20.5386  |
| Total                               |                    | 0.0199          | 0.1809          | 0.1519          | 1.0900e-<br>003 |                  | 0.0138          | 0.0138          |                   | 0.0138           | 0.0138          | 0.0000   | 196.9089  | 196.9089  | 3.7700e-<br>003 | 3.6000e-<br>003 | 198.1073 |

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#### 5.3 Energy by Land Use - Electricity Unmitigated

|  | Electricity<br>Use | Total CO2 | CH4             | N2O             | CO2e     |
|--|--------------------|-----------|-----------------|-----------------|----------|
| Land Use                               | kWh/yr             |           | MT              | /yr             |          |
| Fast Food<br>Restaurant w/o            | 58637.5            | 25.1418   | 7.7000e-<br>004 | 1.6000e-<br>004 | 25.2075  |
| Government<br>Office Building          | 508550             | 218.0496  | 6.6900e-<br>003 | 1.3800e-<br>003 | 218.6191 |
| High Turnover (Sit<br>Down Restaurant) |                    | 249.6082  | 7.6600e-<br>003 | 1.5800e-<br>003 | 250.2602 |
| Medical Office<br>Building             | 90086              | 38.6259   | 1.1900e-<br>003 | 2.5000e-<br>004 | 38.7268  |
| Parking Lot                            | 238813             | 102.3953  | 3.1400e-<br>003 | 6.5000e-<br>004 | 102.6628 |
| Place of Worship                       | 15351.7            | 6.5823    | 2.0000e-<br>004 | 4.0000e-<br>005 | 6.5995   |
| Regional<br>Shopping Center            | 292129             | 125.2552  | 3.8400e-<br>003 | 8.0000e-<br>004 | 125.5824 |
| Total                                  |                    | 765.6584  | 0.0235          | 4.8600e-<br>003 | 767.6583 |

#### 5.3 Energy by Land Use - Electricity Mitigated

|  | Electricity<br>Use | Total CO2 | CH4             | N2O             | CO2e     |
|--|--------------------|-----------|-----------------|-----------------|----------|
| Land Use                               | kWh/yr             | MT/yr     |                 |                 |          |
| Fast Food<br>Restaurant w/o            | 58637.5            | 25.1418   | 7.7000e-<br>004 | 1.6000e-<br>004 | 25.2075  |
| Government<br>Office Building          | 508550             | 218.0496  | 6.6900e-<br>003 | 1.3800e-<br>003 | 218.6191 |
| High Turnover (Sit<br>Down Restaurant) |                    | 249.6082  | 7.6600e-<br>003 | 1.5800e-<br>003 | 250.2602 |
| Medical Office<br>Building             | 90086              | 38.6259   | 1.1900e-<br>003 | 2.5000e-<br>004 | 38.7268  |
| Parking Lot                            | 238813             | 102.3953  | 3.1400e-<br>003 | 6.5000e-<br>004 | 102.6628 |
| Place of Worship                       | 15351.7            | 6.5823    | 2.0000e-<br>004 | 4.0000e-<br>005 | 6.5995   |
| Regional<br>Shopping Center            | 292129             | 125.2552  | 3.8400e-<br>003 | 8.0000e-<br>004 | 125.5824 |
| Total                                  |                    | 765.6584  | 0.0235          | 4.8600e-<br>003 | 767.6583 |

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

|             | ROG    | NOx             | СО              | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|-------------|--------|-----------------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| Category    |        |                 |                 |        | ton              | s/yr            |               |                   |                  |                |          |                 | МТ              | /yr             |        |                 |
| Unmitigated | 1.2725 | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000 | 2.1500e-<br>003 |
|             | 1.2725 | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000 | 2.1500e-<br>003 |

## 6.2 Area by SubCategory

## **Unmitigated**

|                          | ROG             | NOx             | СО              | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4             | N2O    | CO2e            |
|--------------------------|-----------------|-----------------|-----------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|-----------------|--------|-----------------|
| SubCategory              |                 |                 |                 |        | ton              | s/yr            |               |                   |                  |                |          |                 | MT              | /yr             |        |                 |
| Architectural<br>Coating | 0.0194          |                 | i               |        | 1<br>1           | 0.0000          | 0.0000        | !<br>!            | 0.0000           | 0.0000         | 0.0000   | 0.0000          | 0.0000          | 0.0000          | 0.0000 | 0.0000          |
| Consumer<br>Products     | 1.2531          | <del></del>     | 1<br>1<br>1     |        | ,                | 0.0000          | 0.0000        | 1<br>!<br>!<br>!  | 0.0000           | 0.0000         | 0.0000   | 0.0000          | 0.0000          | 0.0000          | 0.0000 | 0.0000          |
| Landscaping              | 1.0000e-<br>004 | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000 | 1                | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000 | 2.1500e-<br>003 |
| Total                    | 1.2725          | 1.0000e-<br>005 | 1.0700e-<br>003 | 0.0000 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005 | 0.0000 | 2.1500e-<br>003 |

## 6.2 Area by SubCategory

## **Mitigated**

|                          | ROG             | NOx             | СО                   | SO2    | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total | Bio- CO2 | NBio- CO2       | Total CO2       | CH4              | N2O    | CO2e            |
|--------------------------|-----------------|-----------------|----------------------|--------|------------------|-----------------|---------------|-------------------|------------------|----------------|----------|-----------------|-----------------|------------------|--------|-----------------|
| SubCategory              |                 |                 |                      |        | ton              | s/yr            |               |                   |                  |                |          |                 | МТ              | <sup>-</sup> /yr |        |                 |
| Architectural<br>Coating | 0.0194          |                 |                      |        |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000          | 0.0000          | 0.0000           | 0.0000 | 0.0000          |
| Consumer<br>Products     | 1.2531          |                 | 1<br> <br> <br> <br> | <br>   |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 0.0000          | 0.0000          | 0.0000           | 0.0000 | 0.0000          |
| Landscaping              | 1.0000e-<br>004 | 1.0000e-<br>005 | 1.0700e-<br>003      | 0.0000 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005  | 0.0000 | 2.1500e-<br>003 |
| Total                    | 1.2725          | 1.0000e-<br>005 | 1.0700e-<br>003      | 0.0000 |                  | 0.0000          | 0.0000        |                   | 0.0000           | 0.0000         | 0.0000   | 2.0300e-<br>003 | 2.0300e-<br>003 | 1.0000e-<br>005  | 0.0000 | 2.1500e-<br>003 |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
| Category    |           | МТ     | √yr    |         |
| Unmitigated | , 70.7010 | 0.4371 | 0.0107 | 91.2392 |
| Mitigated   | , 70.7010 | 0.4370 | 0.0107 | 91.2324 |

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## 7.2 Water by Land Use <u>Unmitigated</u>

|  | Indoor/<br>Outdoor<br>Use | Total CO2 | CH4             | N2O             | CO2e    |  |  |  |
|--|---------------------------|-----------|-----------------|-----------------|---------|--|--|--|
| Land Use                               | Mgal                      |           | MT/yr           |                 |         |  |  |  |
| Fast Food<br>Restaurant w/o            | 0.379417 /<br>0           | 2.2387    | 0.0124          | 3.1000e-<br>004 | 2.5943  |  |  |  |
| Government<br>Office Building          | 6.95309 /<br>0            | 41.0248   | 0.2278          | 5.6000e-<br>003 | 47.5426 |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                           | 22.2253   | 0.1234          | 3.0300e-<br>003 | 25.7563 |  |  |  |
| Medical Office<br>Building             | 0.777979 /<br>0           | 4.5903    | 0.0255          | 6.3000e-<br>004 | 5.3195  |  |  |  |
| Parking Lot                            | 0/0                       | 0.0000    | 0.0000          | 0.0000          | 0.0000  |  |  |  |
| Place of Worship                       | 0.0397369<br>/ 0          | 0.2345    | 1.3000e-<br>003 | 3.0000e-<br>005 | 0.2717  |  |  |  |
| Regional<br>Shopping Center            | 1.42664 /<br>0            | 8.4175    | 0.0467          | 1.1500e-<br>003 | 9.7548  |  |  |  |
| Total                                  |                           | 78.7310   | 0.4371          | 0.0108          | 91.2392 |  |  |  |

## 7.2 Water by Land Use

## **Mitigated**

|  | Indoor/<br>Outdoor<br>Use | Total CO2 | CH4             | N2O             | CO2e    |  |  |  |
|--|---------------------------|-----------|-----------------|-----------------|---------|--|--|--|
| Land Use                               | Mgal                      |           | MT/yr           |                 |         |  |  |  |
| Fast Food<br>Restaurant w/o            | 0.379417 /<br>0           | 2.2387    | 0.0124          | 3.0000e-<br>004 | 2.5941  |  |  |  |
| Government<br>Office Building          | 6.95309 /<br>0            | 41.0248   | 0.2277          | 5.5900e-<br>003 | 47.5390 |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                           | 22.2253   | 0.1234          | 3.0300e-<br>003 | 25.7544 |  |  |  |
| Medical Office<br>Building             | 0.777979 /<br>0           | 4.5903    | 0.0255          | 6.3000e-<br>004 | 5.3191  |  |  |  |
| Parking Lot                            | 0/0                       | 0.0000    | 0.0000          | 0.0000          | 0.0000  |  |  |  |
| Place of Worship                       | 0.0397369<br>/ 0          | 0.2345    | 1.3000e-<br>003 | 3.0000e-<br>005 | 0.2717  |  |  |  |
| Regional<br>Shopping Center            | 1.42664 /<br>0            | 8.4175    | 0.0467          | 1.1500e-<br>003 | 9.7541  |  |  |  |
| Total                                  |                           | 78.7310   | 0.4370          | 0.0107          | 91.2324 |  |  |  |

## 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

## Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e     |
|-------------|-----------|--------|--------|----------|
|             |           | МТ     | √yr    |          |
| Willingatod | 29.3373   | 1.7338 | 0.0000 | 65.7467  |
| Unmitigated | 58.6745   | 3.4676 | 0.0000 | 131.4934 |

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8.2 Waste by Land Use <u>Unmitigated</u>

|  | Waste<br>Disposed | Total CO2 | CH4    | N2O    | CO2e     |
|--|-------------------|-----------|--------|--------|----------|
| Land Use                               | tons              |           | MT     | /yr    |          |
| Fast Food<br>Restaurant w/o            | 14.4              | 2.9231    | 0.1728 | 0.0000 | 6.5508   |
| Government<br>Office Building          | 32.55             | 6.6074    | 0.3905 | 0.0000 | 14.8075  |
| High Turnover (Sit<br>Down Restaurant) |                   | 29.9777   | 1.7716 | 0.0000 | 67.1820  |
| Medical Office<br>Building             | 66.96             | 13.5923   | 0.8033 | 0.0000 | 30.4612  |
| Parking Lot                            | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000   |
| Place of Worship                       | 7.24              | 1.4697    | 0.0869 | 0.0000 | 3.2936   |
| Regional<br>Shopping Center            | 20.22             | 4.1045    | 0.2426 | 0.0000 | 9.1984   |
| Total                                  |                   | 58.6745   | 3.4676 | 0.0000 | 131.4934 |

## 8.2 Waste by Land Use

## **Mitigated**

|  | Waste<br>Disposed | Total CO2 | CH4    | N2O    | CO2e    |  |  |  |
|--|-------------------|-----------|--------|--------|---------|--|--|--|
| Land Use                               | tons              |           | MT/yr  |        |         |  |  |  |
| Fast Food<br>Restaurant w/o            | 7.2               | 1.4615    | 0.0864 | 0.0000 | 3.2754  |  |  |  |
| Government<br>Office Building          | 16.275            | 3.3037    | 0.1952 | 0.0000 | 7.4038  |  |  |  |
| High Turnover (Sit<br>Down Restaurant) |                   | 14.9889   | 0.8858 | 0.0000 | 33.5910 |  |  |  |
| Medical Office<br>Building             | 33.48             | 6.7961    | 0.4016 | 0.0000 | 15.2306 |  |  |  |
| Parking Lot                            | 0                 | 0.0000    | 0.0000 | 0.0000 | 0.0000  |  |  |  |
| Place of Worship                       | 3.62              | 0.7348    | 0.0434 | 0.0000 | 1.6468  |  |  |  |
| Regional<br>Shopping Center            | 10.11             | 2.0522    | 0.1213 | 0.0000 | 4.5992  |  |  |  |
| Total                                  |                   | 29.3373   | 1.7338 | 0.0000 | 65.7467 |  |  |  |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

## 10.0 Vegetation

|               | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|-----------|--------|--------|---------|
| Category      |           | M      | ΙΤ     |         |
| - Ciminigated | 23.3640   | 0.0000 | 0.0000 | 23.3640 |

10.2 Net New Trees
Species Class

|               | Number of<br>Trees | Total CO2 | CH4    | N2O    | CO2e    |
|---------------|--------------------|-----------|--------|--------|---------|
|               |                    |           | M      | Т      |         |
| Miscellaneous | 33                 | 23.3640   | 0.0000 | 0.0000 | 23.3640 |
| Total         |                    | 23.3640   | 0.0000 | 0.0000 | 23.3640 |

# APPENDIX F ENVIRONMENTAL SITE ASSESSMENT – PHASE I REPORT

# California



## **ENVIRONMENTAL SITE ASSESSMENT - PHASE I**

Commercial/Retail Center 16201 – 16287 San Fernando Mission Boulevard 11135 – 11155 Woodley Avenue Granada Hills, California 91344 APNs 2681-011-035, 2681-011-036, and 2681-011-039

## **FOR**

## HARRIDGE DEVELOPMENT GROUP, LLC

6363 Wilshire Blvd., Suite 600 Los Angeles, CA 90048 Attention: Mr. Marc Annotti

CE Job No. EV0216-3436

April 2016

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## **APPENDICES**

- I. Environmental Field Reconnaissance Checklist, Field Interview and User Questionnaires
- II. EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps
- III. Building Permits
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## 1.0 EXECUTIVE SUMMARY

An Environmental Site Assessment - Phase I was prepared for the subject property located at 16201 – 16287 San Fernando Mission Boulevard, 11135 – 11155 Woodley Avenue, Granada Hills, California 91344. The scope of work for the Phase I meets ASTM E 1527-13 Standard Practice for Environmental Site Assessments. The purpose of the Phase I report is to provide information regarding the potential for hazardous material impacts to the soil and groundwater beneath the subject property. Such threats or material threats are identified in this report as Recognized Environmental Conditions (RECs). The presence of Historical Recognized Environmental Conditions (HRECs) and Controlled Recognized Environmental Conditions (CRECs) was also evaluated. The extent of this evaluation in conjunction with owner/client-supplied data is intended to satisfy the requirements of all appropriate inquiry into the previous ownership and uses of the property. The scope of the work included a site reconnaissance, research of land use records and other sources for preliminary indications of hazardous material use, storage, or disposal at the property and/or on contiguous parcels. Acquisition and redevelopment of the property is proposed.

The subject property consists of three irregular shaped parcels of land that encompass approximately 8.22 acres. The property is currently developed as a shopping center that consists of six single-story wood and stucco multi-tenant structures. The vacant structure addressed as 16255 San Fernando Mission Boulevard and the multi-unit structure addressed as 16257 through 16275 ½ were constructed in 1961. The remaining four structures were constructed between 1981 and 1985. The remainder of the property is asphalt paved. Access to the property is via San Fernando Mission Boulevard to the south and Woodley Avenue to the east.

Historical site utilization research indicates that the subject property was undeveloped from 1900 through the 1920s. Historical aerial photograph research indicates that the subject property was developed for agricultural use from at least 1928 through 1952 and has been developed with commercial structures as a shopping center from at least 1964. Historical city directories indicate that commercial tenants have occupied the subject property since 1962.

The property is listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, and DRYCLEANERS databases. Thirteen environmental sites, listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, DRYCLEANERS, SWRCY, EDR Hist Auto, SWEEPS UST, CA FID UST, and HAZNET databases, are located within a one-quarter mile radius of the subject property. No nearby environmental concern sites were identified. The subject site (16233 San Fernando Mission Blvd) is listed as a site undergoing remediation for a release of PCE (dry cleaner) initially detected in 2005. The site is under the jurisdiction of the Los Angeles County Fire Department – Site Mitigation Unit. A vapor extraction remediation system (VES) has operated at the site intermittently since 2009. The 4Q2015 VES operations report (FREY) indicated the total extracted PCE was approximately 176 pounds during the time period 2009-2015. The VES influent concentrations of PCE in vapor were typically below 1 ug/L during the 4Q2015. FREY recommended installation of additional extraction wells and vapor monitoring points. The apparent cleanup goals in soil (SSLs) are in the range of 135-170 ug/kg. The cleanup goal for soil gas is the commercial CHHSL for PCE (0.6 ug/L).

Several data failures were encountered during the preparation of this report. The owner questionnaire was not returned to CE and the LAFD and LACHD have not yet responded to our request for records. These data gaps do not alter the conclusions and recommendations of this report.

3436.Phase.I.2016 iv

#### **EXECUTIVE SUMMARY – Continued**

CE reviewed the Preliminary Title Report prepared by the First American Title Company dated February 1, 2016 for the subject property, identified as 16201, 16269 San Fernando Mission Boulevard and 3101 Woodley Avenue, Granada Hills, California. No environmental liens or environmental activity use limitations (AULs) were identified in connection with the subject property.

California Environmental has prepared an Environmental Site Assessment - Phase I in conformance with the scope and limitations of ASTM 1527-13 for the property located at 16201 – 16287 San Fernando Mission Boulevard, 11135 – 11155 Woodley Avenue, Granada Hills, California 91344. The ongoing PCE remediation at 16233 San Fernando Mission Boulevard constitutes a **Recognized Environmental Condition (REC) in connection with the subject property.** An environmental clean up contingency of \$250,000.00 is recommended for future mitigation efforts associated with the PCE release. Such efforts may include individually or a combination of the following; continuation of the VES work, excavation and offsite disposal of the PCE impacted soil, or installation of an engineering control (sub-slab membrane) to reduce the potential for intrusion of PCE vapors to indoor air within future onsite structures. **No Historical Recognized Environmental Conditions (HRECs) or Controlled-Recognized Environmental Conditions (C-RECs) were identified in connection with the subject property**.

## 2.0 INTRODUCTION

The following report presents the findings of the Environmental Site Assessment - Phase I prepared for the subject property located at 16201 - 16287 San Fernando Mission Boulevard, 11135 - 11155 Woodley Avenue, Granada Hills, California 91344. The scope of the Phase I study meets ASTM E 1527-13 Standard Practice for Environmental Site Assessments and included research of available land use records and other sources for preliminary indications of hazardous material use, storage or disposal at the property. The findings of this study are intended to provide information to the client regarding potential hazardous material impacts to the soil and groundwater beneath the site.

The scope of the investigation was conducted in general accordance with ASTM Standard Practice for Environmental Site Assessments – Phase I, Environmental Site Assessment Process ASTM E 1527-13. The steps outlined in this process are intended to permit a user (client) to satisfy one of the requirements to qualify for the innocent land owner, contiguous property owner, or bona fide purchaser limitations on CERCLA liability. Specifically, this report along with certain obligations of the client, constitutes All Appropriate Inquiry (AAI) into the previous ownership and uses of the property consistent with the standard of care as practiced in this area by environmental professionals. A main component of the assessment is to identify recognized environmental conditions, controlled recognized environmental conditions, and historical recognized environmental conditions, as they may affect the subject property. As defined by ASTM E 1527-13, a recognized environmental condition (REC) means "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." A controlled recognized environmental condition (C-REC) is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)." An historical recognized environmental condition (HREC) is defined as "a past release of any hazardous substances

or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

An important component of complying with the ASTM E 1527-13 Standard is information to be obtained or in the possession of the client and/or seller of the property. Such information includes obtaining and review of a recent title report, any specialized information regarding the site or surrounding area which may give rise to identification of a recognized environmental condition, and/or reasons given by the seller should the purchase price be significantly lower than what would be reasonably expected for a property of similar size and value. Often a real estate appraiser is commissioned to evaluate the purchase or sale price of a property. Such an appraisal is outside the scope of this Phase I Assessment report.

The independent conclusions represent California Environmental's (CE) professional judgment based on the conditions that existed and the information and data available during the course of study. Factual information regarding operations, conditions, and test data provided by the client, the owner or their representatives have been assumed to be correct and complete. This report includes **GENERAL FINDINGS** and **CONCLUSIONS AND RECOMMENDATIONS**, which together with the remainder of this report are subject to the **NOTICE** at the end of the report. **This report was prepared for the sole use and reliance by the client as identified on the title page of this report. Use of this report by other entities is expressly forbidden unless the client and CE grant permission.** 

The scope of work included:

- A walkover of the site.
- Review of client/owner supplied information.
- Review of building and grading permits on file with the City of Los Angeles Department of Building and Safety.

- A records review request for underground storage tank files and industrial waste records maintained by the City of Los Angeles Fire Department Underground Storage Tank and Hazardous Materials Divisions.
- Review of historical USGS topographic maps and historical aerial photographs maintained by EDR Company.
- Research of historical Sanborn Fire Insurance Maps maintained by EDR Company.
- Contact with the California Environmental Protection Agency, Department of Toxic Substances Control to review their files.
- Contact with the California Environmental Protection Agency, Regional Water Quality Control Board to review their files.
- Contact with the Los Angeles County Health Department to review their files.
- Contact with the South Coast Air Quality Management District to review their files.
- Review of the DOMS Online Mapping Program, Oil Field Maps, and oil well records maintained by the State of California Division of Oil, Gas, and Geothermal Resources.
- Review of the City of Los Angeles City Wide Methane Ordinance Map (A-20960).
- Review of Los Angeles County Landfill Maps.
- Review of the following lists and maps of suspect or known contaminated sites; a complete listing of these sources is contained within **APPENDIX V**.
  - California Regional Water Quality Control Board, (RWQCB) Computer Case Listing of Reported Underground Tank Leaks, covering Los Angeles County.
  - California Department of Health Services Hazardous Waste and Substance Sites Cortese List and Contaminated Wells List, which includes the Bond Expenditure Plan (BEP) sites.
  - California Environmental Protection Agency, Facility and Manifest Data, HAZNET.
  - Historical California Environmental Protection Agency, Department of Toxic Substances Control CalSites List.
  - California Department of Health Services, *Hazardous Waste Information System* (HWIS) and Tanner Report.

- California Integrated Waste Management Board, Solid Waste Information System (SWIS) List.
- State Water Resources Control Board, *Toxic Pits Clean-up Act (Toxic Pits)*.
- State Water Resources Control Board, *Hazardous Substance Storage Container Database* (UST, LUST, SLIC, and WDS).
- U.S. Environmental Protection Agency *National Priorities List* (NPL).
- U.S. Environmental Protection Agency Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).
- U.S. Environmental Protection Agency, *Toxic Release Inventory System* (TRIS).
- U.S. Environmental Protection Agency, *Resource Conservation and Recovery Information, System Treatment, Storage and Disposal Facilities*, (RCRA-TSDF).
- U.S. Environmental Protection Agency, *Resource Conservation and Recovery Information System, Large Quantity Generators*, (RCRA-LQG).
- U.S. Environmental Protection Agency, Resource Conservation and Recovery Information System, Small Quantity Generators, (RCRA-SQG).
- U.S. Environmental Protection Agency Superfund Amendment and Reauthorization Act, Title III, (SARA Title III).
- U.S. Environmental Protection Agency, *Emergency Response Notification System* (ERNS).
- U.S. Environmental Protection Agency, Facility Index System (FINDS).
- U.S. Environmental Protection Agency, Civil Enforcement Docket (DOCKET).
- A review of government records databases of suspect or known contaminated sites and historical city directories research was performed by EDR Company. The results of the search are summarized in this report. The EDR reports are enclosed in **APPENDICES II** and **V**.
- Review of previous environmental reports prepared by National Environmental, Orswell and Kasman, Frey Environmental, and others.
- Preparation of this report.

## 3.0 SITE DESCRIPTION

## 3.1 LOCATION AND LEGAL DESCRIPTION

The subject property is located on the north side of San Fernando Mission Boulevard between Woodley Avenue and the Bull Creek flood control channel, in the City of Los Angeles, California; see **FIGURE 1 - VICINITY MAP**. The current street addresses for the property are 16201 through 16287 San Fernando Mission Boulevard and 11135 through 11155 Woodley Avenue. According to the Los Angeles County Tax Assessor's office, the Assessor's Parcel Numbers (APNs) for the subject property are 2681-011-035, 2681-011-036, and 2681-011-039.

#### 3.2 SITE RECONNAISSANCE

The site conditions were observed during a reconnaissance conducted by Gregory Buensuceso of California Environmental on February 26, 2016. California Environmental completed a Field Reconnaissance Checklist during the site reconnaissance. A User Environmental Questionnaire was completed by Yuri Gurevich of Harridge Development Group, LLC who answered in good faith and to the extent of his knowledge. The Owner Environmental Questionnaire was not returned. The Environmental Field Reconnaissance Checklist and User Environmental Questionnaire are included in APPENDIX I. The features described below are shown on the enclosed FIGURE 2 - PLOT PLAN. Photographs of the subject property are attached in the ILLUSTRATIONS section of this report.

## 3.2.1 Description of Property/Proposed Project

The subject property consists of three irregular shaped parcels of land that encompass approximately 8.22 acres. The property is currently developed as a shopping center that consists of six single-story wood and stucco multi-tenant structures. The vacant structure addressed as 16255 San Fernando Mission Boulevard and the multi-unit structure addressed as 16257 through 16275 ½ were constructed in 1961. The remaining four structures were constructed between 1981 and 1985. The remainder of the property is asphalt paved. Access to the property is via San Fernando Mission Boulevard to the south

and Woodley Avenue to the east. Acquisition and redevelopment of the site is proposed. The current tenants of the six structures are described below.

## **Structure One (Three Units)**

## 16281 San Fernando Mission Boulevard

Dr. Jay B Madhure, who operates a family medical practice, occupies this unit. Access to this unit was not granted at the time of the site reconnaissance.

#### 16285 San Fernando Mission Boulevard

This unit is occupied by Granada Hills Cleaners, who operate a dry cleaning business. The tenant operates a closed-loop Union HL860 dry cleaning machine that uses petroleum naphtha instead of the solvent tetrachloroethylene. The dry cleaning machine has a current permit to operate by the South Coast Air Quality Management District (#G33344). One 55-gallon drum of spent petroleum naphtha was observed at the rear of the unit. The drum was stored on a secondary containment platform and properly labeled. The tenant provided hazardous waste manifests for the disposal of the spent solvent, handled by Safety-Kleen Systems, Incorporated. No spills and/or stains were observed near the dry cleaning machine or 55-gallon drum.

#### 16287 San Fernando Mission Boulevard

This unit is occupied by Cig Zone, who sells tobacco products and smoking paraphernalia. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

## **Structure Two (Eight Units)**

#### 16257 San Fernando Mission Boulevard

This unit is occupied by Sunsations Beach Bodies, who operate a body tanning salon. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16257 1/2 San Fernando Mission Boulevard

This unit is occupied by Closeouts, who sell miscellaneous discount merchandise. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16259 San Fernando Mission Boulevard

Cricket Wireless occupies this unit. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16261 San Fernando Mission Boulevard

This unit is occupied by Cork 'N' Bib Liquor Jr. Market, a convenience store. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16263 San Fernando Mission Boulevard

This unit is occupied by House of Grill, a Filipino restaurant. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16267 San Fernando Mission Boulevard

El Encanto Studio Photography occupies this unit. Access to this unit was not granted at the time of the site reconnaissance.

#### 16269 San Fernando Mission Boulevard

Chuck E. Cheese's, a family themed restaurant and arcade occupies this unit. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16275 1/2 San Fernando Mission Boulevard

This unit is occupied by Jesus is Alive Christian Fellowship, Access to this unit was not granted at the time of the site reconnaissance.

## **Structure Three (One Unit)**

#### 16255 San Fernando Mission Boulevard

This unit is currently vacant. Access to this unit was not granted at the time of the site reconnaissance.

## **Structure Four (Three Unit)**

#### 16237 San Fernando Mission Boulevard

Golden Wall, a Chinese restaurant, occupies this unit. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16235 San Fernando Mission Boulevard

This unit is occupied by Princess Nails, a nail salon. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 16233 San Fernando Mission Boulevard

This unit is currently vacant, but was formerly occupied by Granada Hills Cleaners. Dry cleaning facilities have operated in this unit from 1981 through 2014. The former tenants utilized tetrachloroethylene (PCE) as a dry cleaning solvent. Access to this unit was not granted at the time of the site reconnaissance.

## **Structure Five (One Unit)**

#### 16261 San Fernando Mission Boulevard

The California Department of Motor Vehicles occupies this unit. Limited access to the structure was granted at the time of the site reconnaissance. No hazardous substance use was observed in the at the time of the site reconnaissance.

## **Structure Six (Nine Unit)**

## 11135 Woodley Avenue

The Touch of Lily, a beauty salon, occupies this unit. Hazardous substance use in the form of beaty and cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

## 11137 Woodley Avenue

This unit is occupied by the Mighty Mouth, a burger restaurant. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

## 11139 Woodley Avenue

The Granada Hills North Neighborhood Council occupies this unit. Access to this unit was not granted at the time of the site reconnaissance.

## 11141 Woodley Avenue

This unit is occupied by 3 Day Flooring, a residential and commercial flooring retailer. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

#### 11143 Woodley Avenue

Granada Hills Acupuncture and Herb occupy this unit. Access to this unit was not granted at the time of the site reconnaissance.

## 11145 Woodley Avenue

Title Loans Check Into Chash occupies this unit, a personal loan business. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

## 11147 Woodley Avenue

Asana Chiropractic occupies this unit. Access to this unit was not granted at the time of the site reconnaissance.

## 11149 Woodley Avenue

David G. Moody DDS, a dental practice, occupies this unit. Access to this unit was not granted at the time of the site reconnaissance.

## 11151 Woodley Avenue

Arkco Lock and Key, who sell locks and keys, occupies this unit. Hazardous substance use in the form of cleaning supplies was observed in the unit. No other hazardous substance use was observed in this unit at the time of the site reconnaissance.

## 11155 Woodley Avenue

This is the address of the batting cages operated by World Series Batting Range. The batting cages are located in the northwestern corner of the shopping center. No hazardous substance use was observed in this unit at the time of the site reconnaissance. A portable restroom was located near the entrance. The facility was closed at the time of the site reconnaissance.

## 3.2.2 Adjacent Properties

The subject property is bound to the north by the John F. Kennedy High School sports field; to the east by Woodley Avenue with single family homes and commercial properties beyond; to the southeast by the adjacent Taco Bell restaurant; to the south by San Fernando Mission Boulevard with a power substation and single family homes beyond; and to the west by a concrete lined portion of Bull Creek.

## 3.2.3 Topography and Drainage

The subject property has a gentle slope towards the south-southeast. The topographic elevation of the subject property is approximately 960 feet amsl. Drainage from the site is by catch basins and sheetflow towards the adjacent streets and Bull Creek. No evidence of sumps or standing water was observed on the subject property at the time of the site reconnaissance.

## 3.2.4 Past Uses of the Property

No evidence of the past use, treatment, storage, disposal or generation of hazardous substances was observed on the subject property at the time of the site reconnaissance.

## 3.2.5 Use of Hazardous Substances

Hazardous substance use was observed on the subject property in the form of petroleum naphtha at the time of the site reconnaissance. Petroleum naphtha is a hydrocarbon solvent utilized by G. H. Cleaners for dry cleaning. The spent solvent was stored in a 55-gallon drum on a secondary containment platform. No evidence of significant hazardous substance use was observed on the subject property at the time of the site reconnaissance. The spent solvent is disposed of by Safety-Kleen Systems, Incorporated.

## 3.2.6 Storage Tanks

No evidence of existing aboveground or underground storage tanks, clarifiers, sumps, or grease interceptors was observed on the subject property at the time of the site reconnaissance.

## 3.2.7 Containers of Hazardous or Unidentified Substances

One 55-gallon drum of petroleum naphtha was observed at 16285 San Fernando Mission Boulevard. The drum was stored on a secondary containment platform. Containers of cleaning supplies, e.g., bleach, window cleaner, tile cleaner, were observed in all units currently occupied by a tenant. No evidence of spills and/or stains was observed at the time of the site reconnaissance.

#### 3.2.8 Solid Waste Disposal

Multiple trash bins were observed at the rear of the structures. No evidence of significant spills and/or staining was observed on the pavement beneath the bins. No other evidence of onsite disposal or landfill of solid waste material was observed on the subject property at the time of the site reconnaissance.

## 3.2.9 Poly-Chlorinated Biphenyl's (PCBs)

Potential PCB-containing equipment observed at the subject property included four pole-mounted and three vaulted transformers. The transformers are owned and operated by the LACDWP. In the event of a release of dielectric fluid from one of its transformers, the utility company typically performs the cleanup.

Fluorescent light fixtures were observed in the subject buildings. Fluorescent light fixtures manufactured prior to 1977 (and fluorescent light fixtures without a date of manufacture) may have ballasts capacitors that contain PCBs, which is recognized by the EPA as a suspect carcinogen. Used fluorescent lamp tubes are considered to be hazardous mercury-bearing waste requiring proper disposal in accordance with local, state, and federal requirements. The onsite ballasts were not inspected during the site reconnaissance. It is recommended that the fluorescent light fixtures be inspected for PCB content labels prior to disposal.

## 3.2.10 Heating/Cooling Equipment

Heating and cooling equipment was not observed at the time of the site reconnaissance as access to the roofs of the structures was not possible.

## 3.2.11 Asbestos Containing Building Materials (ACM)

Sampling of suspect asbestos containing material (ACM) was not included in the scope of work for this study. Reports provided by the client include asbestos assessment and abatement data for 16255 San Fernando Mission Blvd. The reports document the removal of ACM floor tiles and mastic from the 1<sup>st</sup> and 2<sup>nd</sup> floor areas at 16255 San Fernando Mission Blvd. Suspect ACM was observed in the form of linoleum, ceiling tiles, joint compound, and wallboard in the onsite structures. It is recommended that a certified asbestos consultant prior to renovation or demolition of the subject buildings conduct an comprehensive asbestos survey.

## 3.2.12 Wastewater Disposal Systems

No evidence of wastewater treatment or disposal systems was observed on the subject property at the time of the site reconnaissance.

## 3.2.13 Radon

Radon hazard assessment was not included in the scope of this study. However, the EDR research report indicates the levels of radon at 147 sites located within the 91344 zip code in Los Angeles County were below four picoCurie per Liter (pCi/L), the Federal Action level.

## 3.2.14 Lead

Sampling of suspect lead in paint was not included in the scope of work for this project. Lead content in paint was significantly reduced in 1977. Due to the date of construction of the subject buildings in the 1960s and 1980s, it is possible that lead based paint was utilized onsite. The paint coating of the structures were in good condition at the time of the site reconnaissance.

#### 3.2.15 Wells

Three vapor extraction wells are located behind 16233 San Fernando Mission Boulevard and seven wells are located within the unit. The wells were not accessible at the time of the site reconnaissance. No other evidence of dry wells, irrigation wells, injection wells, abandoned wells, monitoring wells or other wells was observed on the subject property at the time of the site reconnaissance.

#### 3.2.16 Odor

No evidence of strong, pungent or noxious odors was noted on the subject property at the time of the site reconnaissance.

## 3.2.17 Stressed Vegetation

No evidence of stressed vegetation was observed on the subject property at the time of the site reconnaissance.

## 3.2.18 Staining or Residue

No evidence of staining or residue was observed on the subject property at the time of the site reconnaissance.

## 3.2.19 Pits, Ponds, or Lagoons

No evidence of pits, ponds, and/or lagoons was observed on the subject property at the time of the site reconnaissance.

## 3.2.20 Potable Water Supply

Water is supplied to the subject property by the City of Los Angeles Department of Water and Power.

## 3.2.21 Sewage Disposal System

The subject property is connected to the public sewage disposal system. A portable restroom, located near the entrance of World Series Batting Range located at 11155 Woodley Avenue, was observed at the time of the site reconnaissance.

## **3.2.22 Other Conditions of Concern**

No other conditions of environmental concern regarding potential sources for soil and groundwater contamination were observed on the subject property at the time of the site reconnaissance.

#### 3.3 SITE DRIVE-BY

A drive-by of the area within one-quarter mile of the property was conducted to help identify nearby sites that possibly use, store or generate hazardous materials. The area surrounding the subject property consists of residential and commercial properties. No service stations are located on the properties adjacent to the subject property. A list of selected environmental risk sites identified within a one-quarter mile radius of the subject property is included in the STANDARD ENVIRONMENTAL RECORDS SOURCES section of this report.

## 4.0 PREVIOUS WORK

The property owner provided the previous environmental reports prepared for the property. The reports included Phase I/II environmental assessments of the center. The Phase II reports focused on assessment and remediation of the PCE release beneath the former dry cleaner located at 16233 San Fernando Mission Blvd. The assessment data is contained in reports prepared by Gaston & Assoc., AEI Consultants, Partner Engineering Science, Clark/Seif/Clark-Targhee, and FREY. The assessment data was submitted to the LA County Fire Dept. Site Mitigation Unit (LACFD-SMU) who provided oversight and approval of the remediation work at the site (LACFD-SMU correspondence 2008-2013).

National Environmental, Incorporated (NE) prepared a Phase I Environmental Site Assessment for the subject property dated March 8, 1993. The Phase I report concluded that the previous land uses and occupancies have not caused severe environmental impact. NE recommended no additional environmental assessment work at that time on the subject property, but that an annual inspection of Granada Hills Cleaners be conducted to monitor the condition of the dry cleaning machinery, the housekeeping practices, and compliance record concerning storage, usage, and generation of PCE waste.

Orswell and Kasman, Incorporated (O-K) prepared a Phase I Environmental Site Assessment dated May 26, 2015 for the subject property. O-K performed this Phase I ESA in conformance with the scope and

limitations of ASTM Standard E 1527-13. This assessment concluded that no further environmental studies were necessary at that time. O-K concluded that the property owner should continue to work with the Los Angeles County Fire Department to mitigate the PCE contamination problem and obtain a "No Further Action" (NFA) letter upon completion of the remedial activities. O-K recommended that the client (the property owner) obtain an environmental insurance policy should the operator of the dry cleaner be unwilling or unable to complete the remedial activities.

PCE contamination in soil beneath the unit was initially identified in 2005. In 2007, AEI Consultants performed additional assessment work to define the extent of the PCE impacts. The maximum concentration of PCE detected in soil was 3,050,000 ug/kg adjacent to the dry cleaning machine. Partner Engineering and Science (PES) proposed a remedial action plan (RAP) which was approved by the Los Angeles County Fire Department in 2008. The approved RAP included a vapor extraction system (VES) for removal of the PCE in soil. VES operation began on March 9, 2009 from six extraction wells. Verification soil sampling conducted by Partner in 2011 found up to 2,590 ug/kg of PCE at a depth of 5 ft below the cleaners. The concentration of PCE was 2,090 ug/kg at a depth of 15 ft. Partner also found PCE in soil gas up to 270 ug/L. It was recommended that the VES continue to operate at the site. The VES unit removed a total of 176 pounds of PCE from 2009-2015. The most recent influent vapor concentrations were typically less than 1 ug/L (FREY 2015).

## 5.0 GEOLOGY AND HYDROGEOLOGY

The subject property is located in the San Fernando Valley, a structural basin within the tectonically active Transverse Ranges. The San Gabriel and Santa Susana Mountains bound the valley to the north and by the Santa Monica Mountains to the south. The subject property is located along the southern base of the Mission Hills, on the northern side of the San Fernando Valley, within the Granada Hills-Mission Hills deformation belt. The Granada Hills-Mission Hills deformation belt trends east-west along the south flank of the Santa Susana Mountains. The nearest active fault to the subject property is the east-west trending Mission Hills Thrust Fault, located approximately one-half mile north of the site.

Pleistocene alluvial deposits of silt, sand, and gravel occur along the southern flank of the Mission Hills in the vicinity of the subject property.

The Los Angeles County Department of Public Works Hydrological Records Division maintains well information for the County of Los Angeles. The nearest active well to the subject property is well no. 4812C, located approximately 2,600 feet to the north, near the intersection of Halsey Street and Swinton Avenue. The well was last measured on May 28, 2015. The depth to groundwater at that time was 176.40 feet below ground surface with a regional flow direction to the south. The depth to groundwater beneath the subject site is estimated at >200 ft.

## 6.0 SITE UTILIZATION HISTORY

#### 6.1 HISTORICAL CITY DIRECTORIES

EDR Company was contacted to research historical city directories for the subject property and adjacent sites. The city directories were reviewed at approximately five-year intervals spanning from 1920-2013. A summary of city directories reviewed for the subject property is included in **TABLE I**. The EDR City Directory is attached in **APPENDIX II**.

TABLE I
Historical City Directories

| Instituted City Directories     |                                |                                 |  |  |
|---------------------------------|--------------------------------|---------------------------------|--|--|
| Year                            | Use/User                       | Source                          |  |  |
| 16201 San Fernando Mission Blvd |                                |                                 |  |  |
| 2004                            | Sav On Pharmacy                | Haines Company                  |  |  |
| 2008                            | Save on Drugs/Albertsons       | Cole Information Services       |  |  |
| 2013                            | Albertsons                     | Cole Information Services       |  |  |
| 16233 San Fernando Mission Blvd |                                |                                 |  |  |
| 1970                            | State Farm Insurance Companies | Pacific Telephone               |  |  |
| 1975-1980                       | Inflections                    | Pacific Telephone               |  |  |
| 1991-2013                       | Granada Hills Cleaners         | Pacific Bell / Cole Information |  |  |
| 16235 San Fernando Mission Blvd |                                |                                 |  |  |
| 1985                            | Wallpaper Boutique             | Pacific Bell                    |  |  |

**TABLE I**Historical City Directories - Continued

|           | Historical City Directories - C | onunueu                         |
|-----------|---------------------------------|---------------------------------|
| Year      | Use/User                        | Source                          |
|           | 16237 San Fernando Mission      | Blvd                            |
| 1970      | China Kitchen                   | Pacific Telephone               |
| 1975      | Jun Jun Kitchen                 | Pacific Telephone               |
| 1980      | The New Fortune Cookie          | Pacific Telephone               |
| 1985      | Super Heros Inc.                | Pacific Bell                    |
| 2004-2013 | Golden Wall Chinese Food        | Cole Information Services       |
|           | 16255 San Fernando Mission      | Blvd                            |
| 1962-1970 | Grant W. T. Co. Dept. Stores    | Pacific Telephone               |
| 1975      | Granada Hills                   | Pacific Telephone               |
| 1980      | Pic N Save                      | Pacific Telephone               |
| 1991      | Granada Hills                   | Pacific Bell                    |
| 2004-2008 | Big Lots                        | Cole Information Services       |
|           | 16225 San Fernando Mission      | Blvd                            |
| 1062 1070 | Vons Grocery Co Markets Gran    | ada Parifia Talankana           |
| 1962-1970 | Hills                           | Pacific Telephone               |
| 1975      | Granada Hills                   | Pacific Telephone               |
| 2004      | 31 XX                           | Haines Company                  |
|           | 16257 San Fernando Mission      | Blvd                            |
| 1962-1975 | Knollview Pharmacy              | Pacific Telephone               |
| 1991      | Granada Hills                   | Pacific Bell                    |
| 2004-2008 | A & A Vacuum                    | Heines Company                  |
| 2004-2008 | Sunsations                      | Haines Company                  |
| 2013      | All State Vaccum Center         | Cole Information Services       |
| 2013      | Sunsations                      | Core information services       |
|           | 16259 San Fernando Mission      | Blvd                            |
| 1970-1975 | Mels Landing Restaurants        | Pacific Telephone               |
| 1980      | Anson Restaurants               | Pacific Telephone               |
| 2004      | Loje Discount                   | Haines Company                  |
|           | 16261 San Fernando Mission      | Blvd                            |
| 1970-1985 | Cork & Bib Liquors              | Pacific Telephone               |
|           | 16263 San Fernando Mission      | Blvd                            |
| 1975      | The Quality Butcher Shop        | Pacific Telephone               |
| 1991      | Davids Sound of Music           | Pacific Bell                    |
| 2004      | Quiznos Subs                    | Haines Company                  |
|           | 16265 San Fernando Mission      | Blvd                            |
| 1970      | Paradise Interiors              | Pacific Telephone               |
| 1975      | The Bicycle Pedaler             | Pacific Telephone               |
|           | 16267 San Fernando Mission      |                                 |
| 1985-1991 | Frankies Baby Lane              | Pacific Bell                    |
| 1700 1771 | Trankies Daby Dane              |                                 |
| 2004-2013 | CA First Insurance              | Haines Company/Cole Information |

**TABLE I**Historical City Directories - Continued

| Installed City Birectories Con        |  |
|---------------------------------------|--|
| Use/User                              | Source   |
| 16269 San Fernando Mission Blv        | v <b>d</b>   |
| Bella Decors & Flooring               | Pacific Telephone  |
| Chuck-E-Cheese                        | Pacific Bell/Haines Company  |
| C E C Entertainment Inc               | Cole Information Services  |
| Showbiz Pizza Time Inc                |  |
| Pizza Time Theatre                    | Cole Information Services  |
| 16275 San Fernando Mission Blv        | v <b>d</b>   |
| Foam & Fun Tavern                     | Pacific Telephone  |
| Bronco Sales Screen Printing          | Pacific Telephone  |
| Joes Place                            | Pacific Bell/Haines Company  |
| Primerica Financial Services          | Cole Information Services  |
| 16283 San Fernando Mission Blv        | v <b>d</b>   |
| Subway Subs                           | Pacific Bell   |
| Oasis Funding Inc                     | Cole Information Services  |
| 16285 San Fernando Mission Blv        | vd   |
| Imperl Escrow                         | Haines Company   |
| Karousel Home Loans Oasis Funding Inc | Cole Information Services  |
| 16287 San Fernando Mission Blv        | vd   |
| Help you Sell Escrow                  | Pacific Bell   |
| Cig Zone                              | Haines Company/Cole Information  |
| Cig Zone                              | Services   |
| 11135 Woodley Ave                     |  |
| Fantastic Sams                        | Haines Company   |
| West Coast Cuts & Colors              | Cole Information Services  |
| Touch of Lily Beauty Salon            | Cole Information Services  |
| 11137 Woodley Ave                     |  |
| Sports Café                           | Pacific Bell   |
| Mighty Mouth Burgers                  | Cole Information Services  |
| 11139 Woodley Ave                     |  |
| Ron Hendrickson Insurance             | Pacific Bell   |
|                                       | Haines Company   |
| Procorp Inc.                          | Cole Information Services  |
| 11141 Woodley Ave                     |  |
| Bencore Investments                   | Haines Company   |
| Citywide Real Estate Group            | Cole Information Services  |
| 3 Day Flooring                        | Cole Information Services  |
|                                       | Bella Decors & Flooring Chuck-E-Cheese C E C Entertainment Inc Showbiz Pizza Time Inc Pizza Time Theatre  16275 San Fernando Mission Blv Foam & Fun Tavern Bronco Sales Screen Printing Joes Place Primerica Financial Services  16283 San Fernando Mission Blv Subway Subs Oasis Funding Inc  16285 San Fernando Mission Blv Imperl Escrow Karousel Home Loans Oasis Funding Inc  16287 San Fernando Mission Blv Help you Sell Escrow Cig Zone  11135 Woodley Ave Fantastic Sams West Coast Cuts & Colors Touch of Lily Beauty Salon  11137 Woodley Ave  Sports Café Mighty Mouth Burgers  11139 Woodley Ave  Ron Hendrickson Insurance Cruises and Tours Procorp Inc.  11141 Woodley Ave  Bencore Investments Citywide Real Estate Group |

**TABLE I**Historical City Directories - Continued

| V                                   | 1   |  |  |  |
|-------------------------------------|---|--|--|--|
| Use/User                            | Source  |  |  |  |
| 11143 Woodley Ave                   |   |  |  |  |
| Beck Travel                         | Pacific Bell / Haines Company   |  |  |  |
| Granada Hills Acupuncture and Herbs | Cole Information Services   |  |  |  |
| 11145 Woodley Ave                   |   |  |  |  |
| Check Into Cash                     | Cole Information Services   |  |  |  |
| 11147 Woodley Ave                   |   |  |  |  |
| CPR Computer Repair                 | Pacific Bell  |  |  |  |
| 4XProjects Co / Range Realty        | Haines Company  |  |  |  |
| Range Realty                        | Cole Information Services   |  |  |  |
| 11149 Woodley Ave                   |   |  |  |  |
| Dr. David G. Moody, DDS             | Coles Information Services  |  |  |  |
| 11151 Woodley Ave                   |   |  |  |  |
| Central Valley Lock & Key           | Cole Information Services   |  |  |  |
| Arkco Sercurity Co.                 | Cole Information Services   |  |  |  |
| 11135 Woodley Ave                   |   |  |  |  |
| World Series Batting Range          | Cole Information Services   |  |  |  |
|                                     | Beck Travel Granada Hills Acupuncture and Herbs  11145 Woodley Ave  Check Into Cash  11147 Woodley Ave  CPR Computer Repair  4XProjects Co / Range Realty Range Realty  11149 Woodley Ave  Dr. David G. Moody, DDS  11151 Woodley Ave  Central Valley Lock & Key Arkco Sercurity Co.  11135 Woodley Ave |  |  |  |

## 6.2 BUILDING AND GRADING PERMIT RESEARCH

Building permits on file with the City of Los Angeles Department of Building and Safety indicate the structures at 16255 and 16257-16275 San Fernando Mission Boulevard were constructed in 1961. The remaining structures were constructed between 1981 and 1985. The Department of Building and Safety also holds permits for alterations and additions dating from 1963 through 2014.

## 6.3 UNDERGROUND STORAGE TANK PERMIT RESEARCH

The City of Los Angeles Fire Department Underground Storage Tank and Hazardous Materials Divisions were contacted by our personnel to research their files for underground storage tank (UST)

permits and industrial waste records for the subject property. The agency response letter will be forwarded once received should a file exist for the property. Based on a review of previous environmental investigations conducted at the subject property and surrounding areas, no current or former USTs existed at the subject property.

#### 6.4 STATE/COUNTY REGULATORY AGENCY FILE REVIEW

Inquiry letters were sent to the State of California Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board – Los Angeles Region (RWQCB). Responses from the DTSC and the RWQCB indicate no records are maintained for the subject property. The agency inquiries and response letters are included in **APPENDIX IV**.

CalEPA DTSC and RWQCB online databases were also reviewed. The DTSC Envirostor lists Federal Superfund, State Response, Voluntary Clean-ups, School Clean-ups and Investigations, Military Evaluations and Geotracker LUFT/SLIC databases.

The subject property (16233 San Fernando Mission Blvd) is listed on the Los Angeles County Fire Dept. – Site Mitigation Unit (LACFD-SMU) database. LACFD-SMU is the lead agency for approval of the site clean up (PCE) at the former cleaners, as discussed in the **PREVIOUS WORK** section of this report.

## 6.5 LACHD AND SCAQMD FILE REVIEW

An inquiry letter was sent to the Los Angeles County Health Department (LACHD) for any information they may have regarding soil, water or air contamination at the subject property. The agency inquiry letter is included in **APPENDIX IV**. The agency response letter will be forwarded once received should a file exist for the property.

The SCAQMD online FIND database was researched for any active and/or inactive records related to the subject property. A review of the SCAQMD Facility Information Detail (FIND) database indicates that records are maintained for the subject property addresses. Records include permits to operate a diesel generator, dry cleaning equipment that utilize PCE, and the soil vapor extraction (SVE) equipment utilized in the ongoing on-site remediation. The SCAQMD FIND database records are included in **APPENDIX IV**.

## 6.6 HISTORICAL AERIAL PHOTOGRAPH RESEARCH

Historical aerial photographs were reviewed as part of this study. The photographs are part of the aerial photograph collections maintained by the EDR Company. Sixteen photographs (1928-2012) were reviewed for the subject property. The photographs are summarized below in **TABLE II**. The aerial photographs are attached in **APPENDIX II** of this report.

TABLE II Historical Aerial Photographs

| Tilstoffeat Actiai I notographs |             |   |  |
|---------------------------------|-------------|---|--|
| Date                            | Flight No.  | Description   |  |
| 1928                            | USGS        | The subject property and surrounding area appears to be developed with orchard fields. The        |  |
|                                 |             | adjoining property to the southeast is developed with a small residential structure.              |  |
| 1938                            | USGS        | The subject property appears similar to the previous photo. The adjoining property to the         |  |
|                                 |             | southeast has developed another structure.  |  |
| 1947                            | USGS        | The orchard fields in the middle portion of the subject property appear t have been removed       |  |
|                                 |             | and is now a vacant lot. The rest of the subject property appears similar to the previous photo.  |  |
| 1952                            | USGS        | The western half of the subject property is a vacant dirt lot. The eastern portion of the subject |  |
|                                 |             | property appears similar to the previous photo. The adjoining property to the southeast has       |  |
|                                 |             | developed a structure.  |  |
| 1964                            | USGS        | The subject property has been redeveloped with the two current structures on the western          |  |
|                                 |             | portion of the property and two structures on the northern portion of the property. The rest of   |  |
|                                 |             | the subject property is a paved parking lot. The Bull Creek Reservoir Branch has been             |  |
|                                 |             | developed directly to the west of the subject property. The property to the north of the subject  |  |
|                                 |             | property has been redeveloped into a vacant lot. The adjoining property to the southwest has      |  |
|                                 |             | been redeveloped into a paved lot.  |  |
| 1969                            | USGS        | The subject property appears similar to the previous photo. The property directly to the north    |  |
|                                 |             | of the subject property appears to be undergoing construction.                                    |  |
| 1972                            | EDR         | The subject property appears similar to the previous photo. The property to the north of the      |  |
|                                 | Proprietary | subject property has developed the current track/field.   |  |
|                                 | Brewster    |   |  |
|                                 | Pacific     |   |  |

**TABLE II**Historical Aerial Photographs – Continued

| Date | Flight No.  | Description   |
|------|-------------|---|
| 1977 | EDR         | The subject property and surrounding area appear similar to the previous photo.                 |
|      | Proprietary |   |
|      | Brewster    |   |
|      | Pacific     |   |
| 1981 | EDR         | The two structures on the northern end of the subject property have been demolished and         |
|      | Proprietary | appear to be undergoing reconstruction. The rest of the subject property appears similar to the |
|      | Brewster    | previous photo  |
|      | Pacific     |   |
| 1989 | USGS        | The subject property and surrounding area has been developed into its current configuration.    |
| 1994 | USGS/DOQQ   | The subject property and surrounding area appear similar to the previous photo.                 |
| 2002 | USGS        | The subject property and surrounding area appear similar to the previous photo.                 |
| 2005 | USDA/NAIP   | The subject property and surrounding area appear similar to the previous photo.                 |
| 2009 | USDA/NAIP   | The subject property and surrounding area appear similar to the previous photo.                 |
| 2010 | USDA/NAIP   | The subject property and surrounding area appear similar to the previous photo.                 |
| 2012 | USDA/NAIP   | The subject property and surrounding area appear similar to the previous photo.                 |

### 6.7 HISTORICAL FIRE INSURANCE MAPS

The EDR Company was contacted to review historical fire insurance maps for the subject property. There is no Sanborn historical fire insurance map coverage for the subject property. The EDR response letter is included in **APPENDIX II** of this report.

# 6.8 HISTORICAL TOPOGRAPHIC MAP RESEARCH

Historical USGS topographic maps were provided by EDR Company and from online database sources. Maps covering the subject property for ten time periods were found. The map descriptions are summarized below in **TABLE III.** The topographic maps are attached in **APPENDIX II** of this report.

TABLE III
Historical Topographic Maps

| Date | Quadrangle   | Description  |
|------|--------------|--|
| 1900 | San Fernando | The subject property is in an area of scattered development. Bull Canyon can be seen to the north.                                   |
| 1927 | Pacoima      | The subject property is in an area of scattered development. Bull Canyon can be seen to the north.                                   |
| 1940 | San Fernando | The subject property is developed with orchard fields. Bull Canyon can be seen to the north.   |
| 1945 | San Fernando | The subject property is in an area of scattered farm development. San Fernando Reservoir can be seen to the north.                   |
| 1953 | San Fernando | The subject property is in an area of scattered farm development. San Fernando Reservoir can be seen to the north.                   |
| 1966 | San Fernando | The subject property is in an area of dense residential and commercial development. San Fernando Reservoir can be seen to the north. |
| 1972 | San Fernando | The subject property is in an area of dense residential and commercial development. San Fernando Reservoir can be seen to the north. |
| 1988 | San Fernando | The subject property is in an area of dense residential and commercial development. San Fernando Reservoir can be seen to the north. |
| 1995 | San Fernando | The subject property is in an area of dense residential and commercial development. San Fernando Reservoir can be seen to the north. |
| 2012 | San Fernando | The subject property is in an area of dense residential and commercial development. San Fernando Reservoir can be seen to the north. |

# 7.0 NEARBY CONTAMINATED SITES

# 7.1 LANDFILLS

The Major Waste System maps for Los Angeles County, the Solid Waste Information Systems (SWIS), and the Waste Management Unit Database (WMUD) were reviewed to identify landfills and transfer stations located near the property.

Map no. 204-117 and the EDR database report indicate that there are no landfills located within a 2,000-foot radius of the subject property. A recycling collection center is located along the northern property wall. No active hazardous waste landfills are located within Los Angeles County.

#### 7.2 OIL FIELD MAPS/METHANE HAZARD ZONES

Oil field maps published by the State of California Division of Oil, Gas and Geothermal Resources (DOGGR) and online mapping systems (DOGGR Well Finder) were researched to determine if oil production occurred on or near the subject property. The DOGGR Well Finder database indicates that there are no oil wells or oil field located within a 2,000-foot radius of the property. The property is not located within the Methane Hazard Zone as identified on the City of Los Angeles website (ZIMAS – Zone Information and Map Access System).

#### 7.3 STANDARD ENVIRONMENTAL RECORD SOURCES

In addition to the above records, agency database lists were reviewed for known or suspected contaminated sites and for sites that store, generate or use hazardous materials near the subject property. The subject property is identified on the standard environmental government sources researched in this report. The property (16233 San Fernando Mission Blvd) is listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, and DRYCLEANERS databases. Thirteen environmental sites, listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, DRYCLEANERS, SWRCY, EDR Hist Auto, SWEEPS UST, CA FID UST, and HAZNET databases, are located within a one-quarter mile radius of the subject property.

No nearby environmental concern or contaminated sites were identified on the environmental records database. The subject site (16233 San Fernando Mission Blvd) is listed as a site undergoing remediation for a release of PCE (dry cleaner) initially detected in 2005. The site is under the jurisdiction of the LA County Fire Dept. – Site Mitigation Unit. A vapor extraction remediation system (VES) has operated at the site intermittently since 2009. The 4Q2015 VES operations report (FREY) indicated the total extracted PCE was approximately 176 pounds during the time period 2009-2015. The VES influent concentrations of PCE in vapor were typically below 1 ug/L during the 4Q2015. FREY recommended installation of additional extraction wells and vapor monitoring points. The apparent clean up goals in soil (SSLs) are in the range of 135-170 ug/kg. The clean up goal for soil gas is the commercial CHHSL for PCE (0.6 ug/L). Selected environmental risk sites found to exist within one-

quarter mile radius of the property are listed in **TABLE IV**. The EDR Radius Map with GeoCheck is attached in **APPENDIX V**.

TABLE IV
Standard Environmental Record Sources

| Name                       | Address                  | Distance    | Source(s)                           |
|----------------------------|--------------------------|-------------|-------------------------------------|
| Tune                       | Audi ess                 | from S.P.   | Bource(s)                           |
| Granada Hills Cleaners     | 16233 San Fernando       | Subject     | RCRA-SQG, FINDS, EMI, LA Co.        |
|                            | Mission Blvd             | Property    | Site Mitigation, EDR Hist Cleaners, |
|                            |                          | 11.         | DRYCLEANERS,                        |
| Woodley 1 Hour Photo       | 11139 Woodley Ave        | Subject     | RCRA-SQG, FINDS                     |
| •                          | _                        | Property    |                                     |
| In & Out Recycling         | 16201 San Fernando       | Subject     | SWRCY                               |
|                            | Mission Blvd             | Property    |                                     |
| LAUSD Kennedy High         | 11254 Gothic Ave         | Adjacent    | RCRA-SQG, FINDS                     |
| School                     |                          | North       |                                     |
| My Cleaners                | 16157 San Fernando       | 110 ft. E   | EDR Hist Cleaners                   |
|                            | Mission Blvd             |             |                                     |
| Gordon's Mobile Service    | 16156 San Fernando       | 340 ft. SE  | EDR Hist Auto                       |
|                            | Mission Blvd             |             |                                     |
| Glory Cleaners             | 16156 San Fernando       | 340 ft. SE  | EDR Hist Cleaners                   |
|                            | Mission Blvd             |             |                                     |
| ORI Foger                  | 16156 San Fernando       | 340 ft. SE  | SWEEPS UST, CA FID UST,             |
|                            | Mission Blvd             |             | DRYCLEANERS                         |
| Addams Continuation High   | 16341 Donmetz St         | 355 ft. W   | RCRA-LQG                            |
| School                     |                          |             |                                     |
| 7 Days Automotive Center   | 11060 Woodley Ave        | 410 ft. S   | EDR Hist Auto                       |
| R & H Automotive           | 11050 Woodley Ave Unit 2 | 440 ft. SE  | RCRA-SQG, FINDS                     |
| Granada Hills Transmission | 11050 Woodley Ave        | 440 ft. SE  | RCRA-SQG, FINDS, HAZNET, EDR        |
|                            |                          |             | Hist Auto                           |
| Shell Auto Tech            | 16460 Mckeever St        | 1,110 ft. W | EDR Hist Auto                       |

Note: A search of public information databases may omit some nearby contaminated sites due to missing or inaccurate information in the public record.

# 7.4 POTENTIAL VAPOR ENCROACHMENT CONDITION (p-VEC)

The State of California has adopted Indoor Air Quality Guidelines (CHHSLs) issued by CALEPA in 2005/2010. Potential sources for vapor intrusion to indoor air include degassing of solvents and other compounds from contaminated soil and contaminated groundwater. PCE contamination detected in the soil beneath the subject property cleaners poses a risk for vapor intrusion into onsite structures. The vapor intrusion risk will be mitigated during the future redevelopment activities.

# 8.0 GENERAL FINDINGS

During the research phase of this study, the following information was obtained:

- The elevation of the subject property is approximately 960 feet above mean sea level.
- Topographic contour lines in the vicinity of the subject and adjacent properties indicate a gentle slope to the south-southeast.
- No Sanborn Fire Insurance Map coverage is available for the subject property.
- Historical aerial photograph research indicates that the subject property was developed for agricultural use from at least 1928 through 1952 and has been developed with commercial structures as a shopping center from at least 1964.
- Building permits on file with the County of Los Angeles Department of Building and Safety indicate the structures at 16255 and 16257-16275 San Fernando Mission Boulevard were constructed in 1961. The remaining structures were constructed in 1981. The Department of Building and Safety also holds permits for alterations and additions dating from 1963 through 2014.
- Historical city directories indicate that the subject property was occupied by commercial tenants since 1962.
- No records are maintained at DTSC for the subject property.
- No records are maintained at RWQCB for the subject property.

- SCAQMD records include permits to operate a diesel generator, dry cleaning equipment that utilize PCE, and the soil vapor extraction (SVE) equipment utilized in the ongoing on-site remediation.
- No landfills or transfer stations are located within a 2,000-foot radius of the subject property.
- No oil wells or oil fields are located within a 2,000-foot radius of the subject property.
- The subject property is not located within a recognized methane hazard zone.
- The subject property is identified on the standard environmental government sources researched in this report. The property is listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, and DRYCLEANERS databases.
- The nearest listed environmental concern site and contaminated site is the subject property. Tetrachloroethylene (PCE) contamination associated with the former dry cleaner at 16233 San Fernando Mission Boulevard was detected in 2005. The subject property is currently undergoing remedial activities for the contamination.
- The depth to groundwater beneath the subject property estimated to be greater than 200 ft.
- The regional direction of groundwater flow is towards the south.
- A potential vapor encroachment condition (p-VEC) was found associated with the subject property. PCE contamination detected in the soil beneath the subject property poses a risk for vapor intrusion. The vapor intrusion risk will be mitigated during the future redevelopment of the property.

During the site reconnaissance, the following observations were made:

- The subject property consists of three irregular shaped parcels of land that encompass approximately 8.22 acres.
- The property is currently developed as a shopping center that consists of six single-story wood and stucco multi-tenant structures.
- The subject property is nearly level. Drainage from the site is by sheet flow towards the adjacent streets and Bull Creek.
- No evidence of the past use, treatment, storage, disposal or generation of hazardous substances was observed on the subject property.

- Hazardous substance use was observed in the form of petroleum naphtha on the subject property at the time of the site reconnaissance. Petroleum naphtha is a hydrocarbon solvent utilized by G. H. Cleaners for dry cleaning. The spent solvent was stored in a 55-gallon drum on a secondary containment platform.
- No evidence of existing aboveground or underground storage tanks, clarifiers, sumps, or grease interceptors was observed on the subject property.
- One 55-gallon drum of petroleum naphtha was observed at 16285 San Fernando Mission Boulevard. The drum was stored on a secondary containment platform. Containers of cleaning supplies, e.g., bleach, window cleaner, tile cleaner, were observed in all units currently occupied by a tenant. No evidence of spills and/or stains was observed at the time of the site reconnaissance.
- Multiple trash bins were observed at the rear of the structures. No evidence of spills and/or staining was observed on the pavement beneath the bins.
- Potential PCB-containing equipment observed at the subject property included four pole mounted and three vaulted transformers. The transformers are owned and operated by the regional utility company.
- No evidence of wastewater treatment or disposal systems was observed on the subject property.
- Three vapor extraction wells are located behind 16233 San Fernando Mission Boulevard and seven wells are located within the unit. The wells were not accessible at the time of the site reconnaissance. No other evidence of dry wells, irrigation wells, injection wells, abandoned wells, monitoring wells or other wells was observed on the subject property at the time of the site reconnaissance.
- No evidence of strong, pungent or noxious odors was noted on the subject property.
- No evidence of stressed vegetation was observed on the subject property.
- No evidence of staining or residue was observed on the subject property.
- No evidence of pits, ponds, and/or lagoons was observed on the subject property.
- The subject property is connected to the public sewage disposal system.
- The area surrounding the subject property consists of commercial and residential properties.

# 9.0 CONCLUSIONS AND RECOMMENDATIONS

The subject property consists of three irregular shaped parcels of land that encompass approximately 8.22 acres. The property is currently developed as a shopping center that consists of six single-story wood and stucco multi-tenant structures. The vacant structure addressed as 16255 San Fernando Mission Boulevard and the multi-unit structure addressed as 16257 through 16275 ½ were constructed in 1961. The remaining four structures were constructed in 1985. The remainder of the property is asphalt paved. Access to the property is via San Fernando Mission Boulevard to the south and Woodley Avenue to the east. Acquisition and redevelopment of the site is proposed.

Historical site utilization research indicates that the subject property was undeveloped from 1900 through the 1920s. Historical aerial photograph research indicates that the subject property was developed for agricultural use from at least 1928 through 1952 and has been developed with commercial structures as a shopping center from at least 1964. Historical city directories indicate that commercial tenants have occupied the subject property since 1962.

The property is listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, and DRYCLEANERS databases. Thirteen environmental sites, listed on the RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation, EDR Hist Cleaners, DRYCLEANERS, SWRCY, EDR Hist Auto, SWEEPS UST, CA FID UST, and HAZNET databases, are located within a one-quarter mile radius of the subject property. No nearby environmental concern sites were identified. The subject site (16233 San Fernando Mission Blvd) is listed as a site undergoing remediation for a release of PCE (dry cleaner) initially detected in 2005. The site is under the jurisdiction of the LA County Fire Dept. – Site Mitigation Unit. A vapor extraction remediation system (VES) has operated at the site intermittently since 2009. The 4Q2015 VES operations report (FREY) indicated the total extracted PCE was approximately 176 pounds during the time period 2009-2015. The VES influent concentrations of PCE in vapor were typically below 1 ug/L during the 4Q2015. FREY recommended installation of additional extraction wells and vapor monitoring points. The apparent clean up goals in soil (SSLs) are in the range of 135-170 ug/kg. The clean up goal for soil gas is the commercial CHHSL for PCE (0.6 ug/L).

Several data failures were encountered during the preparation of this report. The owner questionnaire was not returned to CE and the LAFD and LACHD have not yet responded to our request for records. These data gaps do not alter the conclusions and recommendations of this report.

The long-term (30+ years) agricultural use of the property would normally indicate the potential for pesticide residue in soil. However the property was graded during the 1960s-1980s development of the site and between 6-12 ft of compacted fill was created. The historical site grading eliminated the potential for elevated concentrations of pesticide residue in shallow soil, and therefore, testing for pesticide residue is not recommended.

CE reviewed the Preliminary Title Report prepared by the First American Title Company dated February 1, 2016 for the subject property, identified as 16201, 16269 San Fernando Mission Boulevard and 3101 Woodley Avenue, Granada Hills, California. No environmental liens or environmental activity use limitations (AULs) were identified in connection with the subject property.

California Environmental has prepared an Environmental Site Assessment - Phase I in conformance with the scope and limitations of ASTM 1527-13 for the property located at 16201 – 16287 San Fernando Mission Boulevard, 11135 – 11155 Woodley Avenue, Granada Hills, California 91344. The ongoing PCE remediation at 16233 San Fernando Mission Boulevard constitutes a **Recognized Environmental Condition (REC) in connection with the subject property.** An environmental clean up contingency of \$250,000.00 is recommended for future mitigation efforts associated with the PCE release. Such effort may include individually or a combination of the following; continuation of the VES work, excavation and offsite disposal of the PCE impacted soil, and installation of an engineering control (sub slab membrane) to reduce the potential for intrusion of PCE vapors to indoor air within future structures. **No Historical Recognized Environmental Conditions (HRECs) or Controlled-Recognized Environmental Conditions (C-RECs) were identified in connection with the subject property**.

This report is subject to the following **NOTICE**:

# 10.0 NOTICE

All properties are subject to some element of environmental risk and the risk cannot be eliminated. Industrial and commercial properties developed prior to modern environmental laws are especially risk prone to environmental hazards which include, but are not limited to, wastes which may be toxic, ignitable, corrosive or reactive. The potential for these environmental hazards to impact the use of the property can be reduced by the identification and mitigation of the hazards prior to development or redevelopment of the property. Due to the difficulty in locating underground wastes, in some cases it is not always possible to ascertain that hazardous wastes are present on the property prior to development.

A Phase I environmental site assessment does not utilize subsurface exploration to check for the presence of hazardous wastes on the property. The experience of the assessor, along with the research of available reports, aerial photographs and land use records are used to evaluate the potential for hazardous wastes to occur on the site. Based on the information gained from the historical research, subsurface exploration may be recommended to check for the presence of hazardous wastes. Preexisting environmental problems such as the presence of hazardous wastes in the soil or groundwater, can be concealed by grading activities and site improvements. If such wastes are present these wastes cannot be observed.

The undersigned, Charles I. Buckley declares that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 and I have the specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20.

This report was prepared with the skill and competence as commonly used by environmental professionals in this area. No warranty, expressed or implied, of any kind is made or intended in connection with this report, or by the fact you are being furnished this report, or by any other oral or written statement.

Should you have any questions or desire any additional information, please contact the undersigned.

Respectfully Submitted,

Charles I. Buckley

Professional Geologist No. 4035

Certified Engineering Geologist No. 1250

Certified Hydrogeologist No. 55



# 11.0 REFERENCES AND QUALIFICATIONS

- 1. ASTM International, Designation: E1527-13, *Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process*, 2013.
- 2. ASTM International, Designation: E2600-10, Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions, 2010.
- 3. California Environmental Protection Agency (CalEPA), California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties, 2005/2010.
- 4. City of Los Angeles Fire Department, File Review, March 2016.
- 5. Los Angeles County Department of Public Works Hydrological Records Division, *Well Information*, February 2016.
- 6. SCAQMD, File Review, February 2016.
- 7. LACHD, File Review, February 2016.
- 8. RWQCB, File Review, February 2016.
- 9. DTSC, File Review, September 2016.
- 10. EDR Aerial Photo Decade Package, *Inquiry No. 4535889.9*, February 2016.
- 11. EDR Historical Topographic Map Report, *Inquiry No. 4535889.4*, February 2016.
- 12. EDR-Radius Map with Geocheck, *Inquiry No. 4535889.2s*, February 2016.
- 13. EDR-City Directory, *Inquiry No. 4535889.5*, February 2016.
- 14. Certified Sanborn® Map Report, *Inquiry No. 4535889.3*, February 2016.
- 15. Major Waste Systems Maps, Los Angeles County, Map No. 204-117, June 1972.
- 16. State of California Division of Oil, Gas and Geothermal Resource, Well Finder Database, 2016.
- 17. USGS 7.5-minute Topographic Map, Hollywood Quadrangle, 1966 Photo Revised 1981.
- 18. National Environmental, Inc., Preliminary Site Assessment, 11101-11155 Woodley Ave., 16201-16285 San Fernando Mission Blvd., Granada Hills, CA 91344, dated March 8, 1993.

- 19. Gaston & Associates, Environmental Site Assessment, Dry Cleaner Property Located At 16233 San Fernando Mission Boulevard, Granada Hills, CA, dated December 1, 2005.
- 20. Los Angeles County Fire Department Health Hazardous Materials Division Site Mitigation Unit, *Correspondence*, dated 2008-2013
- 21. Partner Engineering and Science, Inc., Confirmation Sampling Report, Granada Hills Cleaners, 16233 San Fernando Mission Boulevard, Granada Hills, California 91344, dated June 10, 2011.
- 22. Partner Engineering and Science, Inc., Soil Vapor Extraction 1<sup>st</sup> Quarter 2012 Status Report, Granada Hills Cleaners, 16233 San Fernando Mission Boulevard, Granada Hills, California 91344, dated May 2, 2012.
- 23. Clark Seif Clark, Inc., New Vapor Extraction Wells Installation Work Plan Soil Vapor Extraction System, Granada Hills Dry Cleaners, 16233 San Fernando Mission Boulevard, Granada Hills, California 91344, dated May 13, 2014.
- 24. Orswell & Kasman, Inc., *Phase I Environmental Site Assessment Report, Granada Hills Plaza,* 16201-16287 San Fernando Mission Boulevard, 11101-11155 Woodley Avenue, Granada Hills, California 91344, dated May 26, 2015.
- 25. Frey Environmental, Inc., Addendum to Remedial Action Plan, Granada Hills Cleaners, 16233 San Fernando Mission Boulevard, Granada Hills, California, (LACFD SMU File# 07-703-R00000215), dated January 25, 2016.
- 26. Frey Environmental, Inc., Vapor Extraction Remediation System Operation And Maintenance Report Fourth Quarter 2015, Granada Hills Cleaners, 16233 San Fernando Mission Boulevard, Granada Hills, California, (LACFD SMU File# 07-703-R00000215), dated January 25, 2016.

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# **EDUCATION**:

Masters Work in Hydrogeology
 California State University, Los Angeles, 1980-1988

• **Bachelor of Science**, Geology (Engineering Geology) University of California, Los Angeles, 1978

# **REGISTRATIONS AND APPOINTMENTS:**

- State of California, Dept. of Conservation, Former Member, State Mining and Geology Board (Appointed by Gov. Pete Wilson and State Senate confirmed to 4 year term, 1997-2001)
- State of California, Certified Hydrogeologist, No. 55
- State of California, Registered Geologist No. 4035
- State of California, Certified Engineering Geologist No. 1250

# **PROFESSIONAL EXPERIENCE:**

Jan 88-Present CALIFORNIA ENVIRONMENTAL

**CEO - Principal Hydrogeologist** 

Founded California Environmental in January of 1988. Clients include Fortune 500 Corporations, County Government, Municipal Agencies, Financial Institutions, Land Developers, and Consultants. Principal Investigator for groundwater supply and groundwater contamination investigations. Project leader for groundwater remediation at a State of California Superfund Sites. Principal hydrogeologist for design and implementation of a groundwater monitoring network for an existing Sanitary Landfill. Lead investigator to delineate structure of a California Groundwater Basin; Pioneered use of a cost effective soil/gas vapor technique used to track groundwater plumes. Conducted over 2000 Phase I Environmental Investigations in California. These investigations included the use and interpretation of historic topographic maps, Sanborn Insurance Maps, aerial photography, and other historic data sources. Successfully completed remedial clean-up on 500+ sites in southern California; including impacts associated with fuels, PCBs, metals, asbestos and chlorinated solvents. Expert consultant for environmental impairment of soil and groundwater: Expert for the Port of Los Angeles, L.A. County Counsel, L.A. City Recreation and Parks and private attorneys.

# **PROFESSIONAL EXPERIENCE (cont.):**

Mar 84-Dec 87 KOVACS-BYER AND ASSOCIATES

Manager Environmental Services Group

Spearheaded the development into the groundwater and environmental segments of consulting market. Ascended from project geologist status to manager of Environmental Services Group. Responsible for all aspects of project management including; organization and staffing, developing technical requirements needed to complete projects, client and agency liaison.

Provided technical leadership for groundwater testing including design and analysis of aquifer pump tests. Lead Geotechnical Investigator for remedial repair of complex landslide terrains. Prepared Seismic Analysis for critical facilities. Recommended specialized drainage systems for abatement of groundwater problems. Project Consultant for award winning projects on which severe geotechnical problems were overcome.

Mar 80-Mar 84 GEOTECHNICAL SERVICES GROUP; BUREAU OF ENGINEERING; CITY OF LOS ANGELES

Assistant Engineering Geologist

Performed geologic mapping in hillside areas of the City of Los Angeles. Reviewed Geotechnical Reports submitted to the City of Los Angeles for private development. Directed landslide investigations. Prepared Expert Opinion documents regarding groundwater and geologic issues for the City Engineer and City Attorney. Conducted field monitoring of known landslides within the City of Los Angeles.

Aug 79-Mar 80 UNITED STATES GEOLOGICAL SURVEY Field Assistant

Assisted in geological mapping for a uranium resource development project sponsored by the Department of Energy and the United States Geological Survey.

# **CONTINUING EDUCATION:**

- "Advanced Data Analysis Techniques for Evaluating and Quantifying Natural Attenuation for Remediation of Contaminated Sites", NGWA Short Course, March 2007.
- "Technical Guidance for Indoor Air Vapor Intrusion", Severn Trent Laboratory, San Pedro, CA, 1/2005.
- "Low Cost Remediation Techniques", AGSE, San Francisco, CA 2002.
- "Remediation of MtBE", AGSE, Anaheim, CA 2002.
- "Assessment and Management of MtBE Impacted Sites", San Francisco, January 1999.
- "Workshop on MtBE Water Issues", Los Angeles, June 1997.
- "Management Action Programs Seminar", Newport Beach, November 1996.
- "ACWA Groundwater Workshop", Monterey, June 1995.
- "SeSoil Modeling Workshop" GSC, San Francisco, CA, October 1994

# **CONTINUING EDUCATION (cont.):**

- "Groundwater Monitoring and Remediation", Short Course AEG, October 1992
- "Microbial Processes in Biodegradation", AGSE, Albuquerque NM, February, 1991
- "Introduction to Groundwater Geochemistry", National Water Well Association, San Francisco, CA 1988
- ◆ "Fate and Transport of Contaminants in the Subsurface", United States Environmental Protection Agency, San Francisco, CA, December, 1987.
- "How to Monitor and Sample the Vadose Zone "National Water Well Association, San Diego, CA, 1988.
- "Treatment Technology for Contaminated Groundwater" UCLA Fall, 1986.
- "Groundwater Contamination Detection, Monitoring and Cleanup", UCLA, April, 1986.
- "Introduction to Groundwater Modeling", National Water Well Association, Fullerton, CA 1985.

# **ORAL PRESENTATIONS AND SEMINARS:**

- ♦ "Overview of Environmental Regulations, State and Federal Laws" Guest Lecturer, University of Southern California, 1991.
- "Environmental Risks and Underground Tank Leaks, Commercial Property Inspection" California Real Estate Inspectors Association, Santa Monica, CA., May, 1988.
- ♦ "Modified Technique for Soil/Gas Surveys to Detect Groundwater Contamination". Association of Engineering Geologists, Southern California Section meeting. December, 1987.
- "Historic Aerial Photographic Evidence of Landslide Development, Potrero Canyon, CA."
   Association of Engineering Geologists Annual Meeting, San Francisco, CA., October, 1986.
- "Environmental Issues and Careers", Guest Lecturer, USC Department of Geology, Spring 1992.

# **PROFESSIONAL PAPERS:**

- ◆ "Geology, Landslides and Slope Stabilization. Potrero Canyon Park, Pacific Palisades, CA." Association of Engineering Geologists Guidebook, June 20, 1987.
- "Red Rose Landslide Stabilization, 3358-3400

Red Rose Drive, CA.

with Hollingsworth, R.A.; Association of Engineering Geologists Guidebook. June 20, 1987.

 "Residential Development and Landsliding, Castellammare Mesa area, Los Angeles, CA." Association of Engineering Geologists Guidebook.
 June 2, 1984.

### **AFFILIATIONS:**

Association of Engineering Geologists.
Association of Groundwater Scientists and Engineers.
California Groundwater Association.
Hazardous Waste Association of California.
Hydrology Section-American Geophysical Union.
National Water Well Association

# **ILLUSTRATIONS**

Site Photographs - Plates 1-6 Figure 1 - Vicinity Map Figure 2 - Plot Plan



View of subject property to the northwest. 16281-16287 San Fernando Mission Blvd., Granada Hills, 91344



View of subject property to the northwest. 16257-16255 San Fernando Mission Blvd., Granada Hills, 91344



View of subject property to the northwest. 11139-11151 Woodley Ave., Granada Hills, 91344



View of subject property to the northeast. 16261 San Fernando Mission Blvd., Granada Hills, 91344



View of subject property to the northeast. 11137 Woodley Ave., Granada Hills, 91344



Former Granada Hills Cleaners (active remediation location). 16233 San Fernando Mission Blvd., Granada Hills, 91344



Vapor extraction system at rear of former Granada Hills Cleaners location. 16233 San Fernando Mission Blvd., Granada Hills, 91344



Closed-loop Union HL860 dry cleaning machine. 16285 San Fernando Mission Blvd., Granada Hills, 91344



55-gallon drum of petroleum naphtha inside Granada Hills Cleaners. 16285 San Fernando Mission Blvd., Granada Hills, 91344



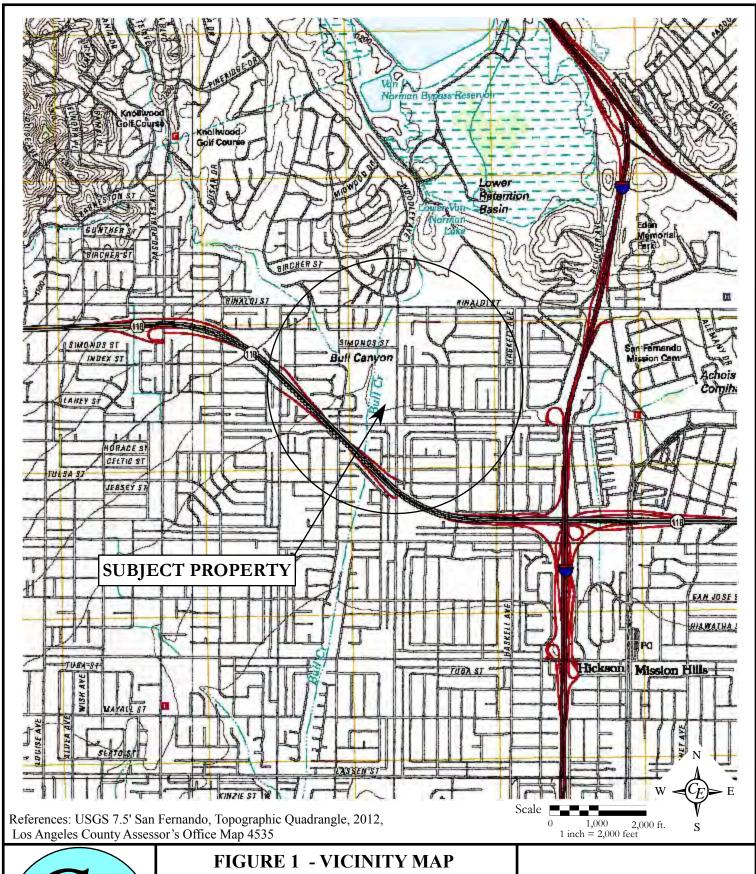
Vaulted transformers on the subject property. 16201 – 16287 San Fernando Mission Blvd., Granada Hills, 91344



Trash bin on the subject property. 16201 – 16287 San Fernando Mission Blvd., Granada Hills, 91344



Bull Creek (View to the north). 16201 – 16287 San Fernando Mission Blvd., Granada Hills, 91344





16225 San Fernando Mission Blvd, Granada Hills, CA

| Drawn By: | RTB | Job # | EV0216-3436 |
|-----------|-----|-------|-------------|
|           |     |       |             |

Checked By: CIB Date: APRIL 2016

California Environmental





References: Google Earth.

# FIGURE 2 - PLOT PLAN

16225 San Fernando Mission Blvd, Granada Hills, California

Drawn By: RTB | Job # EV0216-3436

Checked By: CIB Date: APRIL 2016

California Environmental

# APPENDIX I

**Environmental Field Reconnaissance Checklist and Field Interview and User Questionnaires** 

# ENVIRONMENTAL FIELD RECONNAISSANCE CHECKLIST (PART A)

Completed By:Gregory BuensucesoTitle:Staff GeologistProperty Address:San Fernando Mission Blvd and Woodley AveDate:February 26, 2016

|     | USES OF THE PROPERTY   |   |  |  |  |  |
|-----|--|---|--|--|--|--|
| 1.  | Name of present occupants of the property (include business names and addresses or unit numbers):  | See property description in report.                                 |  |  |  |  |
| 2.  | Describe the present use(s) of the property:   | Commercial  |  |  |  |  |
| 3.  | Describe the present of adjacent properties:   | Residential, commercial, high school                                |  |  |  |  |
| 4.  | Is the property used for an industrial use?  | No  |  |  |  |  |
| 5.  | Is any adjoining property used for an industrial use?  | No  |  |  |  |  |
| 6.  | Is the property used as a gasoline station, auto repair facility, commercial printing facility, dry cleaners, photo developing laboratory, or junkyard? If so, identify which and give the name of the business(es):           | Yes, a dry cleaners is located at 16285 San Fernando Mission Blvd.  |  |  |  |  |
| 7.  | Is the property used as a landfill or a waste treatment, storage, processing, recycling, or disposal facility?   | No  |  |  |  |  |
| 8.  | Is any adjoining property used as a gasoline station, auto repair facility, commercial printing facility, dry cleaners, photo developing laboratory, or junkyard? If so, identify which and give the name of the business(es): | No  |  |  |  |  |
| 9.  | Is any adjoining property used as a landfill or a waste treatment, storage, processing, recycling, or disposal facility?   | No  |  |  |  |  |
| 10. | Is the property used for agricultural purposes?  | No  |  |  |  |  |
|     | PROPERTY CO  | ONDITIONS   |  |  |  |  |
| 11. | Are there or have there been any damaged or discarded industrial or automotive batteries on the property?  | No  |  |  |  |  |
| 12. | Are there currently any solvents, paints, fuels, pesticides, herbicides, or other chemicals, in individual containers larger than 5 gallons or totaling more than 50 gallons, used on or stored at the property?               | Yes, petroleum naphtha at 16285 San Fernando Mission Blvd.          |  |  |  |  |
| 13. | Are there currently any industrial drums (typically 55 gallons) or sacks of chemicals located on the property?   | Yes, 55-gallon drum of spent petroleum naphtha at the dry cleaners. |  |  |  |  |
| 14. | Is there any visible evidence fill dirt has been brought onto the property from a contaminated site?   | No  |  |  |  |  |
| 15. | Is there any visible evidence fill dirt has been brought onto the property from an unknown site?   | No  |  |  |  |  |
| 16. | Are there any waste treatment or waste disposal ponds, pits or lagoons on the property?  | No  |  |  |  |  |
| 17. | Is there any stained soil, or soil emitting unusual odors, on the property?  | No  |  |  |  |  |

| 18. Are there any flooring, drains, or walls in the facility that are stained by substances other than water or have emitted unusual odors?  | No  |
|--|---|
| 19. Is there heating and cooling equipment onsite?   | Yes, but not directly observed  |
| 20. What is the fuel source for any onsite heating and cooling equipment?  | Likely electricity and/or gas   |
| 21. Is there any visible evidence of storage tanks (underground or aboveground) at the property?   | No  |
| 22. Are there currently or have there been any vent pipes, fill pipes, fill ports, or surface covers indicating possible fill ports on the property or adjacent to any building located on the property?   | No  |
| 23. Is there visible evidence of geotechnical and/or environmental subsurface assessments such as patched borings or groundwater monitoring well covers?   | No  |
| 24. Are there any oil wells, drilling sumps, mud pits, or oil pipelines on or adjacent to the property?  | No  |
| 25. Are there any pipelines on, beneath, or adjacent to the property, other than water, sewer, and natural gas utilities serving the property?   | No  |
| 26. Is the property known to be located in a methane hazard area due to oil fields, natural seepage, or landfill gas?  | No  |
| 27. Does the property or any facility at the property produce wastewater other than domestic sewage and storm water runoff?  | No  |
| 28. Are there any waste water treatment systems (clarifiers, oil/water separators, grease traps, filtration systems, etc.) at the property?  | No  |
| 29. How is waste water from the property disposed of? Sanitary sewer. Septic system. Surface water. Pond, pit, sump, or well. Other (describe).  | Sanitary sewer and a portable restroom at the 11155 Woodley Avenue.   |
| 30. Does the property or any facility at the property produce solid waste other than domestic trash and greenwaste?  | The medical office at 16281 likely produces bio/medical waste, access to the unit was not granted and an interview was denied by the staff. |
| 31. How is solid waste from the property disposed of?  Municipal or private trash service. Recycling. Onsite dumping or burial. Other (describe).  | Trash service   |
| 32. How is solid waste stored at the property?   | Bins at the rear of the property  |
| 33. Does the property or any facility at the property generate hazardous or special waste in the course of normal operation? Examples include spent solvents, photo processing waste, waste oil, used filters, etc. Provide copies of generator notification or waste manifests. | Yes, spent solvent (petroleum naphtha) at the dry cleaners. A waste manifest by safety-kleen was provided by the tenant.                    |
| 34. If hazardous or special wastes are generated at the property, how are they stored?   | 55-gallon drum  |
| 35. Are pesticides or herbicides stored, mixed, or disposed of on the property?  | No  |

| 36. Are there any transformers, capacitors, or hydraulic equipment on the property that are known or suspected of containing PCBs?   | Yes, pole mounted and vaulted transformers                    |
|--|---|
| 37. Are there any building materials on the property known or suspected to contain asbestos? Please describe:  | Ceiling and floor tiles                                       |
| ENVIRONMENTAI  | COMPLIANCE  |
| 38. Does the property or any occupant of or facility on the property have any licenses, permits, registrations, or notifications for tanks, pipelines, industrial waste, wastewater treatment, wastewater discharge, stormwater discharge, waste disposal, waste storage or treatment, air emissions, chemical use, or chemical storage? | Granada Hills Dry Cleaners                                    |
| 39. Is there visible evidence of any spills, leaks, or other releases or threatened releases of any hazardous substances or petroleum products from the property to soil, groundwater, or surface water?   | An active VES remediation at 16233 San Fernando Mission Blvd. |
| 40. Is there visible evidence of any release or threatened release of any hazardous substances or petroleum products from another location to soil, groundwater, or surface water at the property?   | No  |
| 41. Is there visible evidence of the current or past existence of environmental violations on the property or in any facility located on the property?   | No  |
| 42. Does the property discharge waste water, other than storm water runoff, into a storm drain or onto adjacent properties or streets?   | No  |
| 43. Does the property discharge waste water, other than storm water, into a sanitary sewer system?   | No  |
| 44. Is there visible evidence that hazardous substances, petroleum products, unidentified waste materials, tires, batteries, or any other waste materials have been dumped, buried, or burned on the property?   | No  |

ceworks@calenviro.com

Fax: 818-991-1544

# **USER QUESTIONNAIRE (PART C)**

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Action of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

The purpose of this section, defined in ASTM E1527-05, Section 6.1 *Users Responsibilities*, is to describe tasks to be performed by the user that will help identify the possibility of *recognized environmental conditions* in connection with the property. These tasks do not require the technical expertise of an *environmental professional* and are generally not performed by *environmental professionals* performing a *Phase I Environmental Site Assessment*. The purpose of this *User Questionnaire is* to assist the *environmental professional* in gathering information from the *user* that may be material to *identifying recognized environmental conditions*.

| Cor | mpleted By: Yuri Gurevich  | Title:                                   |
|-----|--|--|
| Pro | perty Address: 16225 San Fernando Mission  | Date: 2/24/16                            |
| 1.  | Are you aware of any environmental cleanup liens against   | No                                       |
|     | the <i>property</i> that are filed or recorded under federal, tribal, sate or local law?   |  |
| 2.  | Are you aware of any AULs, such as <i>engineering controls</i> ,   | No                                       |
|     | land use restrictions or <i>institutional controls</i> that are in   |  |
|     | place at the site and/or have been filed or recorded is a  |  |
|     | registry under federal, tribal, state or local law?  |  |
| 3.  | As the user of this ESA do you have any specialized  | No                                       |
|     | knowledge or experience related to the <i>property</i> or nearby   |  |
|     | properties? For example, are you involved in the same line   |  |
|     | of business as the current or former occupants of the  |  |
|     | property or an adjoining property so that you would have   |  |
|     | specialized knowledge of the chemicals and processes used by this type of business?  |  |
| 4.  | Does the purchase price being paid for this <i>property</i>  | Yes                                      |
| ''  | reasonably reflect the fair market value of the <i>property</i> ?  | 100                                      |
|     | If you concluded that there is a difference, have you  |  |
|     | considered whether the lower purchase price is because   |  |
|     | contamination is known or believed to be present at the  |  |
|     | property?  |  |
| 5.  | Are you aware of commonly known or reasonably  |  |
|     | ascertainable information about the property that would help the environmental professional to identify conditions   |  |
|     | indicative of releases or threatened releases? For example,  |  |
|     | as user.   |  |
|     | a. Do you know the past uses of the <i>property</i> ?  | Yes, retail plaza                        |
|     | 1 1 7  |  |
|     | b. Do you know of specific chemicals that are present or   | One of the tenants is a cleaners         |
|     | once were present at the <i>property</i> ?   |  |
|     | December 1 and 1 a | V DIII                                   |
|     | c. Do you know of spills or other chemical releases that have taken place at the <i>property</i> ?   | Yes, can provide previous PH1            |
|     | have taken place at the property:  |  |
| 6.  | Do you know of any environmental cleanups that have  | Yes, can provide information from seller |
|     | taken place at the property?   | , , ,                                    |
| 7.  | As the user of this ESA, based on your knowledge and   | No                                       |
|     | experience related to the <i>property</i> , are there any obvious  |  |
|     | indicators that point to the presence or likely presence of  |  |
|     | contamination at the <i>property</i> ?   |  |

| APPENDIX II  |
|--|
|  |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |
| EDR City Directory, Aerial Photographs, Sanborn Maps, and Topographic Maps |

# 3436

16225 San Fernando Mission Blvd Granada Hills, CA 91344

Inquiry Number: 4535889.5

February 11, 2016

# **The EDR-City Directory Abstract**



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### **SECTION**

**Executive Summary** 

**Findings** 

**City Directory Images** 

**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

### **Disclaimer - Copyright and Trademark Notice**

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# **DESCRIPTION**

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

### **RESEARCH SUMMARY**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

| <u>Year</u> | Source                    | <u>TP</u> | <u>Adjoining</u> | Text Abstract | Source Image |
|-------------|---------------------------|-----------|------------------|---------------|--------------|
| 2013        | Cole Information Services | -         | Χ                | X             | -            |
|             | Cole Information Services | Χ         | X                | X             | -            |
| 2008        | Cole Information Services | -         | X                | Χ             | -            |
|             | Cole Information Services | Χ         | X                | Χ             | -            |
| 2006        | Haines Company            | -         | -                | -             | -            |
| 2004        | Haines Company            | Χ         | X                | Χ             | -            |
| 2003        | Haines & Company          | -         | -                | -             | -            |
| 2001        | Haines Company, Inc.      | -         | -                | -             | -            |
| 2000        | Haines                    | -         | -                | -             | -            |
| 1999        | Haines Company            | -         | -                | -             | -            |
| 1996        | GTE                       | -         | -                | -             | -            |
| 1995        | Pacific Bell              | -         | X                | Χ             | -            |
| 1992        | PACIFIC BELL WHITE PAGES  | -         | -                | -             | -            |
| 1991        | Pacific Bell              | -         | X                | Χ             | -            |
|             | Pacific Bell              | Χ         | X                | Χ             | -            |
| 1990        | Pacific Bell              | -         | X                | Χ             | -            |
|             | Pacific Bell              | Χ         | X                | X             | -            |
| 1986        | Pacific Bell              | -         | -                | -             | -            |
| 1985        | Pacific Bell              | -         | X                | Χ             | -            |
|             | Pacific Bell              | Χ         | X                | Χ             | -            |
| 1981        | Pacific Telephone         | -         | -                | -             | -            |
| 1980        | Pacific Telephone         | -         | X                | X             | -            |
|             | Pacific Telephone         | Χ         | X                | Χ             | -            |
| 1976        | R.L. Polk & Co Publishers | -         | -                | -             | -            |
| 1975        | Pacific Telephone         | Χ         | X                | X             | -            |
|             |                           |           |                  |               |              |

| <u>Year</u> | <u>Source</u>                            | <u>TP</u> | <u>Adjoining</u> | Text Abstract | Source Image |
|-------------|--|-----------|------------------|---------------|--------------|
| 1972        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1971        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1970        | Pacific Telephone                        | Χ         | X                | Χ             | -            |
| 1969        | Pacific Telephone                        | -         | -                | -             | -            |
| 1967        | R. L. Polk & Co.                         | Χ         | -                | Χ             | -            |
| 1966        | Pacific Telephone                        | -         | -                | -             | -            |
| 1965        | GTE                                      | -         | -                | -             | -            |
| 1964        | Pacific Telephone                        | -         | -                | -             | -            |
| 1963        | Pacific Telephone                        | -         | -                | -             | -            |
| 1962        | Pacific Telephone                        | Χ         | X                | Χ             | -            |
| 1961        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1960        | Pacific Telephone                        | -         | -                | -             | -            |
| 1958        | Pacific Telephone                        | -         | -                | -             | -            |
| 1957        | Pacific Telephone                        | -         | -                | -             | -            |
| 1956        | Pacific Telephone                        | -         | X                | X             | -            |
| 1955        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1954        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1952        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1951        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1950        | Pacific Telephone                        | -         | X                | X             | -            |
| 1949        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1948        | Associated Telephone Company, Ltd.       | -         | -                | -             | -            |
| 1947        | Pacific Directory Co.                    | -         | -                | -             | -            |
| 1946        | Southern California Telephone Co         | -         | -                | -             | -            |
| 1945        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1944        | R. L. Polk & Co.                         | -         | -                | -             | -            |
| 1942        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1940        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1939        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1938        | Los Angeles Directory Company Publishers | -         | -                | -             | -            |
| 1937        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1936        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1935        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1934        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1933        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1932        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1931        | TRIBUNE-NEWS PUBLISHING CO.              | -         | -                | -             | -            |
| 1930        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1929        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1928        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1927        | Los Angeles Directory Co.                | -         | -                | -             | -            |
| 1926        | Los Angeles Directory Co.                | -         | -                | -             | -            |

| <u>Year</u> | Source                    | <u>TP</u> | <u>Adjoining</u> | Text Abstract | Source Image |
|-------------|---------------------------|-----------|------------------|---------------|--------------|
| 1925        | Los Angeles Directory Co. | -         | -                | -             | -            |
| 1924        | Los Angeles Directory Co. | -         | -                | -             | -            |
| 1923        | Los Angeles Directory Co. | -         | -                | -             | -            |
| 1921        | Los Angeles Directory Co. | -         | -                | -             | -            |
| 1920        | Los Angeles Directory Co. | _         | _                | -             | -            |

# **SELECTED ADDRESSES**

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

| <u>Address</u>                  | <u>Type</u>    | <u>Findings</u> |
|---------------------------------|----------------|-----------------|
| 16259 San Fernando Mission Blvd | Client Entered | X               |
| 16257 San Fernando Mission Blvd | Client Entered | X               |
| 16267 San Fernando Mission Blvd | Client Entered | X               |
| 16269 San Fernando Mission Blvd | Client Entered | X               |
| 16283 San Fernando Mission Blvd | Client Entered | X               |
| 16265 San Fernando Mission Blvd | Client Entered | X               |
| 16285 San Fernando Mission Blvd | Client Entered | X               |
| 16263 San Fernando Mission Blvd | Client Entered | X               |
| 16261 San Fernando Mission Blvd | Client Entered | X               |
| 16287 San Fernando Mission Blvd | Client Entered | X               |
| 16301 San Fernando Mission Blvd | Client Entered |                 |
| 16275 San Fernando Mission Blvd | Client Entered | X               |

## TARGET PROPERTY INFORMATION

## **ADDRESS**

16225 San Fernando Mission Blvd Granada Hills, CA 91344

## **FINDINGS DETAIL**

Target Property research detail.

# **SAN FERNANDO MISSION BLVD**

#### 16225 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                               | <u>Source</u>     |
|-------------|---|-------------------|
| 2004        | 31 XX                                     | Haines Company    |
| 1975        | Granada Hills                             | Pacific Telephone |
| 1970        | VONS GROCERY COMPANY VONS<br>MARKETS      | Pacific Telephone |
| 1962        | VON S GROCERY CO MARKETS<br>GRANADA HILLS | Pacific Telephone |

### 16257 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>             |
|-------------|------------------------|---------------------------|
| 2013        | ALLSTATE VACUUM CENTER | Cole Information Services |
|             | SUNSATIONS             | Cole Information Services |
| 2008        | A & A VACUUM           | Cole Information Services |
|             | SENSATIONS             | Cole Information Services |

## San Fernando Mission Blvd

### 16257 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>     |
|-------------|--------------------|-------------------|
| 2004        | A&AVACUUM          | Haines Company    |
|             | SUNSATIONS         | Haines Company    |
| 1991        | Granada Hills      | Pacific Bell      |
| 1975        | Knollview Pharmacy | Pacific Telephone |
| 1970        | KNOLLVIEW PHARMACY | Pacific Telephone |
| 1962        | KNOLLVIEW PHARMACY | Pacific Telephone |

# SAN FERNANDO MISSION BLVD

#### 16259 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>             |
|-------------|------------------------|---------------------------|
| 2013        | LADIES WORKOUT EXPRESS | Cole Information Services |
| 2008        | Q & L WORKOUT TEAM INC | Cole Information Services |

## San Fernando Mission Blvd

### 16259 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>     |
|-------------|------------------------|-------------------|
| 2004        | LOJE DISCOUNT          | Haines Company    |
| 1980        | ANSON RESTAURANT       | Pacific Telephone |
| 1975        | Mels Landing restrnts  | Pacific Telephone |
| 1970        | MEL S LANDING RESTRNTS | Pacific Telephone |

## SAN FERNANDO MISSION BLVD

## 16261 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>             | <u>Source</u>             |
|-------------|-------------------------|---------------------------|
| 2008        | CORK N BIB LIQUOR STORE | Cole Information Services |

### San Fernando Mission Blvd

#### 16261 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>     |
|-------------|------------------------|-------------------|
| 2004        | no info                | Haines Company    |
| 1985        | CORK N BIB LIQUORS     | Pacific Bell      |
| 1980        | CORK N BIB LIQUORS INC | Pacific Telephone |
| 1975        | CORK N BIB LIQUORS INC | Pacific Telephone |
| 1970        | CORK-N-BIB LIQUORS     | Pacific Telephone |

# SAN FERNANDO MISSION BLVD

### 16263 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>             |
|-------------|----------------|---------------------------|
| 2013        | HOUSE OF GRILL | Cole Information Services |

# San Fernando Mission Blvd

#### 16263 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>                | <u>Source</u>     |
|-------------|----------------------------|-------------------|
| 2004        | QUIZNOSSUBS                | Haines Company    |
| 1991        | Davids Sound Of Music      | Pacific Bell      |
| 1975        | Quality Butcher Shoppe The | Pacific Telephone |

#### 16265 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>                      | <u>Source</u>     |
|-------------|----------------------------------|-------------------|
| 1975        | Bicycle Pedaler The              | Pacific Telephone |
| 1970        | PARADISE INTERIORS GRANADA HILLS | Pacific Telephone |

## SAN FERNANDO MISSION BLVD

### 16267 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                            | <u>Source</u>             |
|-------------|--|---------------------------|
| 2013        | CALIFORNIA FIRST INSURANCE             | Cole Information Services |
| 2008        | CALIFORNIA FIRST INSURANCE<br>SERVICES | Cole Information Services |

## San Fernando Mission Blvd

### 16267 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>     |
|-------------|------------------------|-------------------|
| 2004        | CAFIRSTINSURANCE       | Haines Company    |
|             | SUNSATIONS             | Haines Company    |
| 1991        | Frankies Baby Lane     | Pacific Bell      |
| 1985        | Frankies Baby Lane     | Pacific Bell      |
| 1970        | WASSERSTEIN ALAN H DDS | Pacific Telephone |

## **SAN FERNANDO MISSION BLVD**

### 16269 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>             | <u>Source</u>             |
|-------------|-------------------------|---------------------------|
| 2013        | PIZZA TIME THEATRE      | Cole Information Services |
| 2008        | C E C ENTERTAINMENT INC | Cole Information Services |
|             | SHOWBIZ PIZZA TIME INC  | Cole Information Services |

# San Fernando Mission Blvd

#### 16269 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>                            | <u>Source</u>     |
|-------------|--|-------------------|
| 2004        | CHUCK E CHEESES                        | Haines Company    |
|             | PIZZATIMETHEATRE 818 36 60 W           | Haines Company    |
| 1990        | CHUCK E CHEESE S PIZZA TIME<br>THEATRE | Pacific Bell      |
| 1970        | BELLA DECORS & FLOORING                | Pacific Telephone |

# SAN FERNANDO MISSION BLVD

#### 16275 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                     | <u>Source</u>             |
|-------------|---------------------------------|---------------------------|
| 2013        | CANTINA DE ORO                  | Cole Information Services |
|             | PRIMERICA                       | Cole Information Services |
|             | ZIVETZ SCHWARTZ & SALTSMAN CPAS | Cole Information Services |
| 2008        | PRIMERICA FINANCIAL SERVICES    | Cole Information Services |

# San Fernando Mission Blvd

#### 16275 San Fernando Mission Blvd

| <u>Year</u> | <u>Uses</u>                     | <u>Source</u>     |
|-------------|---------------------------------|-------------------|
| 2004        | CHURCH                          | Haines Company    |
|             | JOE S PLACE                     | Haines Company    |
|             | NCPA S                          | Haines Company    |
|             | SCHWARTZ&SALTSMA                | Haines Company    |
|             | WHOLECOMMUNITY                  | Haines Company    |
|             | ZIVETZ                          | Haines Company    |
| 1991        | Curtis JW CPA                   | Pacific Bell      |
|             | Joes Place                      | Pacific Bell      |
|             | Joes Pool Service               | Pacific Bell      |
|             | JOES S CRAP ME TAL & S ALE S CO | Pacific Bell      |
|             | Joes Scaffolding                | Pacific Bell      |
|             | PO Box 1246 Reseda              | Pacific Bell      |
| 1985        | JOES PLACE                      | Pacific Bell      |
|             | Joes Pool Service               | Pacific Bell      |
| 1980        | BRONCO SALES SCREEN PRNTNG      | Pacific Telephone |
| 1975        | Foam And Fun                    | Pacific Telephone |
|             | Foam And Fun taverns            | Pacific Telephone |
| 1970        | FOAM & FUN TAVRN                | Pacific Telephone |

## SAN FERNANDO MISSION BLVD

#### 16283 SAN FERNANDO MISSION BLVD

<u>Year</u> <u>Uses</u> <u>Source</u>

2013 OASIS FUNDING INC Cole Information Services

### San Fernando Mission Blvd

16283 San Fernando Mission Blvd

YearUsesSource1991Subway Sandwich Lucky CenterPacific Bell

#### **SAN FERNANDO MISSION BLVD**

#### 16285 SAN FERNANDO MISSION BLVD

<u>Year</u> <u>Uses</u> <u>Source</u>

2008 KAROUSEL HOME LOANS Cole Information Services
OASIS FUNDING INC Cole Information Services

### San Fernando Mission Blvd

#### 16285 San Fernando Mission Blvd

<u>Year</u> <u>Uses</u> <u>Source</u>

2004 IMPERLESCROW Haines Company

### SAN FERNANDO MISSION BLVD

#### 16287 SAN FERNANDO MISSION BLVD

<u>Year</u> <u>Uses</u> <u>Source</u>

2013 CIG ZONE
 2008 CIG ZONE
 Cole Information Services
 Cole Information Services

## San Fernando Mission Blvd

## 16287 San Fernando Mission Blvd

<u>Year</u> <u>Uses</u> <u>Source</u>

2004 CIGZONE Haines Company
 1991 Help U Sell Escrow Pacific Bell

16301 San Fernando Mission Blvd

<u>Year</u> <u>Uses</u> <u>Source</u>

# SAN FERNANDO MISSION RD

### 16225 SAN FERNANDO MISSION RD

| <u>Year</u> | <u>Uses</u>                      | <u>Source</u>     |
|-------------|----------------------------------|-------------------|
| 1967        | Other Vons Markets Granada Hills | Pacific Telephone |
|             | Vons Los Angeles Markets         | Pacific Telephone |

# ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

# **COLLETT AVE**

### 11123 COLLETT AVE

| <u>Year</u> | <u>Uses</u>                   | <u>Source</u>     |
|-------------|-------------------------------|-------------------|
| 2004        | SFERREIRASteven               | Haines Company    |
| 1980        | STEVE S DRY WALL INSTALLATION | Pacific Telephone |
| 1975        | Ferreira Steven               | Pacific Telephone |
| 1970        | HINZ MERLIN H                 | Pacific Telephone |
|             | HINZ MERLIN H                 | Pacific Telephone |
| 1962        | HINZ MERLIN H                 | Pacific Telephone |

## 11129 COLLETT AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>     |
|-------------|--------------|-------------------|
| 2004        | SMETSTony    | Haines Company    |
| 1975        | Hale Wm B    | Pacific Telephone |
| 1970        | HALE WM B    | Pacific Telephone |
|             | HALE WM B    | Pacific Telephone |
| 1962        | SCOTT DANL W | Pacific Telephone |

### 11130 COLLETT AVE

| <u>Year</u> | <u>Uses</u>   | <u>Source</u>     |
|-------------|---------------|-------------------|
| 2004        | OSMETSKathy H | Haines Company    |
| 1995        | Stneets Tony  | Pacific Bell      |
| 1985        | Smets Greg    | Pacific Bell      |
|             | Smets Kathy H | Pacific Bell      |
| 1980        | SMETS KATHY H | Pacific Telephone |
|             | SMETS GREG    | Pacific Telephone |
| 1975        | Smets Paul E  | Pacific Telephone |
| 1970        | SMETS PAUL E  | Pacific Telephone |
|             | SMETS PAUL E  | Pacific Telephone |
| 1962        | PONTI G P     | Pacific Telephone |

### 11133 COLLETT AVE

| <u>Year</u> | <u>Uses</u>           | <u>Source</u>             |
|-------------|-----------------------|---------------------------|
| 2008        | RC LEIST CONSTRUCTION | Cole Information Services |
| 2004        | LEISTRobert           | Haines Company            |

| <u>Year</u> | <u>Uses</u>          | <u>Source</u>     |
|-------------|----------------------|-------------------|
| 1980        | BUCHLER M            | Pacific Telephone |
|             | BUCHLER GEO          | Pacific Telephone |
| 1975        | Mermelstein Sidney C | Pacific Telephone |
|             | Mermelstein Susan    | Pacific Telephone |
| 1970        | MERMELSTEIN SIDNEY C | Pacific Telephone |
|             | MERMELSTEIN SIDNEY C | Pacific Telephone |
| 1962        | TAYLOR CHAS E        | Pacific Telephone |

## 11138 COLLETT AVE

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 1980        | BRENNAN TRACI     | Pacific Telephone |
|             | BRENNAN WM        | Pacific Telephone |
| 1970        | OLSWAY DONALD     | Pacific Telephone |
|             | OLSWAY DONALD     | Pacific Telephone |
| 1962        | VERALDI RICHARD A | Pacific Telephone |

## 11141 COLLETT AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | MERIAUXRulh    | Haines Company    |
| 1991        | Meriaux RD     | Pacific Bell      |
| 1985        | Merida M       | Pacific Bell      |
|             | Meriaux R D    | Pacific Bell      |
| 1980        | MERIAUX R D    | Pacific Telephone |
| 1975        | Meriaux R D    | Pacific Telephone |
| 1970        | MERIAUX R D    | Pacific Telephone |
|             | MERIAUX R D    | Pacific Telephone |
| 1962        | BROWNING LEROY | Pacific Telephone |

# **HORACE ST**

## 16230 HORACE ST

| <u>Year</u> | <u>Uses</u>                 | <u>Source</u>     |
|-------------|-----------------------------|-------------------|
| 2004        | SULLIVAN A                  | Haines Company    |
| 1980        | FOWLER RONALD G & JACQUELIN | Pacific Telephone |
| 1975        | Fowler Ronald G             | Pacific Telephone |
| 1970        | FOWLER RONALD G             | Pacific Telephone |
|             | FOWLER RONALD G             | Pacific Telephone |
| 1962        | POOLE LOYD Y                | Pacific Telephone |

#### 16231 HORACE ST

| <u>Year</u> | <u>Uses</u>             | <u>Source</u>     |
|-------------|-------------------------|-------------------|
| 2004        | PATTON Jhn              | Haines Company    |
| 1975        | Stevenson Lawrence E Jr | Pacific Telephone |
| 1962        | FELTY M                 | Pacific Telephone |

## 16238 HORACE ST

| <u>Year</u> | <u>Uses</u>          | <u>Source</u>     |
|-------------|----------------------|-------------------|
| 1980        | HUYBREGTS ALEX C     | Pacific Telephone |
| 1975        | Sobolewski Stanislaw | Pacific Telephone |
| 1970        | SOBOLEWSKI STANISLAW | Pacific Telephone |
|             | SOBOLEWSKI STANISLAW | Pacific Telephone |
| 1962        | SOBOLEWSKI STANISLAW | Pacific Telephone |

### 16239 HORACE ST

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | DELACRUZEmily   | Haines Company    |
| 1975        | Holroyd Michael | Pacific Telephone |

## 16244 HORACE ST

| <u>Year</u> | <u>Uses</u>         | <u>Source</u>     |
|-------------|---------------------|-------------------|
| 2004        | OMAHONY Christopher | Haines Company    |
| 1991        | Mahoney Mary        | Pacific Bell      |
|             | Mahony Chrjstopher  | Pacific Bell      |
|             | Mahony J Ryan       | Pacific Bell      |
| 1985        | Mahony Christopher  | Pacific Bell      |
| 1980        | MAHONEY MARY        | Pacific Telephone |
| 1962        | CARPENTER FLOYD J   | Pacific Telephone |

### 16245 HORACE ST

| <u>Year</u> | <u>Uses</u>             | <u>Source</u>             |
|-------------|-------------------------|---------------------------|
| 2008        | BEHAVIORBIZ             | Cole Information Services |
| 2004        | SGRAVELLEMarc           | Haines Company            |
|             | SGRAVELLE Barbara       | Haines Company            |
| 1985        | Gravelle Marc & Barbara | Pacific Bell              |
|             | Dunavant Michael I      | Pacific Bell              |
|             | Dunavant D              | Pacific Bell              |
|             | Dunatov Thos G          | Pacific Bell              |
| 1962        | OHMSTEDT ERNEST         | Pacific Telephone         |

#### 16253 HORACE ST

| <u>Year</u> | <u>Uses</u> | <u>Source</u> |
|-------------|-------------|---------------|
|-------------|-------------|---------------|

2008 REC INTERNATIONAL Cole Information Services

1980 CAPODIECI RONALD Pacific Telephone

### 16256 HORACE ST

| <u>Year Uses</u> | <u>Source</u> |
|------------------|---------------|
|------------------|---------------|

2004 no info
 1975 Peterson Marsha
 Peterson Thos
 Pacific Telephone
 Pacific Telephone

## **SAN FENDO MISSION BLVD**

### 16124 SAN FENDO MISSION BLVD

YearUsesSource1995Riend JohnPacific Bell

### **SAN FERNANDO MISSION BLVD**

#### 16105 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | no info     | Haines Company |

#### 16106 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>   | <u>Source</u>     |
|-------------|---------------|-------------------|
| 2004        | HORVAT Frank  | Haines Company    |
| 1975        | Simon John Jr | Pacific Telephone |
| 1970        | SIMON JOHN JR | Pacific Telephone |
|             | SIMON JOHN JR | Pacific Telephone |
| 1962        | SIMON JOHN JR | Pacific Telephone |

## 16107 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>   | <u>Source</u>     |
|-------------|---------------|-------------------|
| 2004        | SOTO Olga     | Haines Company    |
|             | PUMA Eric     | Haines Company    |
| 1975        | Windham Roy E | Pacific Telephone |
| 1970        | WINDHAM ROY E | Pacific Telephone |
|             | WINDHAM ROY E | Pacific Telephone |
| 1962        | KEHOE FRANK J | Pacific Telephone |

#### 16112 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 2004        | BARLOW Charles    | Haines Company    |
| 1970        | HOLLENBACH FRED P | Pacific Telephone |
|             | HOLLENBACH FRED P | Pacific Telephone |
| 1956        | GONZALEZ RUBEN S  | Pacific Telephone |

## 16115 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 2004        | CUNNINGHAM Thomas | Haines Company    |
| 1980        | CUNNINGHAM THOS   | Pacific Telephone |
| 1975        | Cunningham Thos E | Pacific Telephone |
| 1970        | CUNNINGHAM THOS E | Pacific Telephone |
|             | CUNNINGHAM THOS E | Pacific Telephone |
| 1962        | CUNNINGHAM THOS E | Pacific Telephone |

### 16118 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | VELASCO Francis | Haines Company    |
| 1962        | HANKS W E       | Pacific Telephone |

### 16121 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | GARCIATheodore | Haines Company    |
| 1980        | GARCIA T A     | Pacific Telephone |
| 1975        | Lewis Floyd M  | Pacific Telephone |
| 1970        | SEADO A M      | Pacific Telephone |
|             | SEADO JOEY E   | Pacific Telephone |
|             | SEADO JOEY E   | Pacific Telephone |
|             | SEADO A M      | Pacific Telephone |
| 1962        | SEADO A M      | Pacific Telephone |

# 16124 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | ORIENDJohn      | Haines Company    |
| 1991        | Riend John      | Pacific Bell      |
| 1980        | RIEND JOHN      | Pacific Telephone |
| 1975        | Riend John      | Pacific Telephone |
| 1962        | CRUMP E FRANK   | Pacific Telephone |
| 1956        | MICHALAK ROBT E | Pacific Telephone |

#### 16127 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>         | <u>Source</u>     |
|-------------|---------------------|-------------------|
| 2004        | DELATORREArturo     | Haines Company    |
|             | SALAS Maria Dolores | Haines Company    |
| 1991        | Miller Bill R       | Pacific Bell      |
| 1985        | Miller Bill R       | Pacific Bell      |
| 1975        | Miller Bill R       | Pacific Telephone |
| 1970        | MILLER BILL R       | Pacific Telephone |
|             | MILLER BILL R       | Pacific Telephone |
| 1962        | MILLER BILL R       | Pacific Telephone |

## 16130 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>           | <u>Source</u>     |
|-------------|-----------------------|-------------------|
| 2004        | DELROSARIO Roberto    | Haines Company    |
| 1985        | Slagle Raymond A      | Pacific Bell      |
|             | Slagle S C            | Pacific Bell      |
| 1980        | SLAGLE RAYMOND A      | Pacific Telephone |
| 1975        | Slagle Raymond S      | Pacific Telephone |
| 1962        | BUTTERFIELD RICHARD J | Pacific Telephone |
| 1956        | BUTTERFIELD RICHARD J | Pacific Telephone |

### 16131 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>     |
|-------------|--------------------|-------------------|
| 2004        | SLYTai             | Haines Company    |
| 1975        | Bartels Fredrick   | Pacific Telephone |
| 1962        | COOK DENNIS        | Pacific Telephone |
| 1956        | BILTMORE HOMES INC | Pacific Telephone |

## 16137 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | BARGE Douglas  | Haines Company    |
|             | HO Kieu Ann    | Haines Company    |
| 1991        | Ho Kieu Anh    | Pacific Bell      |
|             | Ho L           | Pacific Bell      |
|             | Ho Lam         | Pacific Bell      |
| 1980        | KOZIOL STUART  | Pacific Telephone |
| 1975        | Pridemore John | Pacific Telephone |
| 1962        | BELLISH JOHN P | Pacific Telephone |

#### 16138 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>              | <u>Source</u>             |
|-------------|--------------------------|---------------------------|
| 2013        | ALTA DENA EXPRESS        | Cole Information Services |
| 2008        | ALTA DENA MARKET         | Cole Information Services |
| 2004        | ALTADENA EXPRESS         | Haines Company            |
| 1980        | ALTEA DENA DAIRY         | Pacific Telephone         |
| 1975        | Granada Hills            | Pacific Telephone         |
| 1970        | PETERSON DAIRY DRIVE IN- | Pacific Telephone         |
|             | PETERSON DAIRY DRIVE IN- | Pacific Telephone         |
|             |                          |                           |

### 16140 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | no info     | Haines Company |

#### 16143 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>      | <u>Source</u>     |
|-------------|------------------|-------------------|
| 2004        | SIBRIANDina      | Haines Company    |
| 1975        | Velez Stan       | Pacific Telephone |
| 1970        | ATTMORE WM H     | Pacific Telephone |
|             | ATTMORE WM H     | Pacific Telephone |
| 1962        | ZUBER THOS L SGT | Pacific Telephone |

#### 16151 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                          | Source                    |
|-------------|--------------------------------------|---------------------------|
| 2013        | SUPER BLUE GREEN ALGAE               | Cole Information Services |
|             | KREMIN WILLIAM ELECTRICAL CONTRACTOR | Cole Information Services |
| 2008        | ALTERNATIVE HEALTH SOLUTIONS         | Cole Information Services |
| 2004        | SUPER BLUE GREEN                     | Haines Company            |
|             | ELECTRICL                            | Haines Company            |
|             | KREMINWM                             | Haines Company            |
|             | ALGAE                                | Haines Company            |
| 1985        | Century Tenant Improvements Inc      | Pacific Bell              |
| 1980        | NATIONAL HOMES REALTY                | Pacific Telephone         |
|             | FODIMAN MILTON                       | Pacific Telephone         |
| 1975        | NATIONAL HOT ROD ASSOCIATION         | Pacific Telephone         |
|             | National Homes Realty                | Pacific Telephone         |
|             | Fodiman Milton                       | Pacific Telephone         |
| 1970        | NATIONAL HOMES REALTY                | Pacific Telephone         |
|             | FODIMAN MILTON                       | Pacific Telephone         |
|             | NATIONAL HOMES REALTY                | Pacific Telephone         |
|             |                                      |                           |

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 1970        | FODIMAN MILTON    | Pacific Telephone |
| 1962        | WALLACE ED REALTY | Pacific Telephone |

## 16153 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                           | <u>Source</u>             |
|-------------|---------------------------------------|---------------------------|
| 2013        | SAGAZ INSURANCE CENTER                | Cole Information Services |
| 2008        | VALLEY PREMIER                        | Cole Information Services |
| 2004        | JR MEDICAL SUPPLY                     | Haines Company            |
| 1980        | WARRENS TERMITE CONTROL               | Pacific Telephone         |
| 1970        | SNOW RODERICK L DVM                   | Pacific Telephone         |
|             | GRANADA KNOLLS VETERINARY<br>HOSPITAL | Pacific Telephone         |
|             | GRANADA KNOLLS VETERINARY<br>HOSPITAL | Pacific Telephone         |
|             | SNOW RODERICK L DVM                   | Pacific Telephone         |
| 1962        | MATZKIN WM L DR                       | Pacific Telephone         |
|             |                                       |                           |

## 16155 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                 | <u>Source</u>             |
|-------------|-----------------------------|---------------------------|
| 2013        | WESTSIDE BARBER SHOP        | Cole Information Services |
| 2008        | TLC BEAUTY SALON & SUPPLIES | Cole Information Services |
| 2004        | SUPPLIES                    | Haines Company            |
|             | TLC BEAUTY SALON            | Haines Company            |
| 1991        | S AUN DRAS BE AUTY S ALOON  | Pacific Bell              |
| 1980        | BETTY MORGAN HAIR FASHION   | Pacific Telephone         |
| 1975        | Betty Morgan Hair Fashion   | Pacific Telephone         |
| 1970        | BETTY MORGAN HAIR FASHIONS  | Pacific Telephone         |
|             | BETTY MORGAN HAIR FASHIONS  | Pacific Telephone         |

## 16156 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>             |
|-------------|--------------------|---------------------------|
| 2013        | REGAL CLEANERS     | Cole Information Services |
|             | GLORY CLEANERS     | Cole Information Services |
|             | YUMMY DONUTS       | Cole Information Services |
|             | SILKY NAIL         | Cole Information Services |
|             | BURRITO FACTORY    | Cole Information Services |
| 2008        | HYPNO CORP         | Cole Information Services |
|             | Z N GLORY CLEANERS | Cole Information Services |
|             | MARY J             | Cole Information Services |
|             | YUMMY DONUTS NO 2  | Cole Information Services |

| <u>Year</u> | <u>Uses</u>                                 | <u>Source</u>             |
|-------------|---|---------------------------|
| 2008        | GUIDOS PIZZA & PASTA                        | Cole Information Services |
|             | WOODLEY MEDICAL EQUIPMENT                   | Cole Information Services |
|             | BURITO FACTORY                              | Cole Information Services |
| 2004        | YUMMY DONUTS NO                             | Haines Company            |
|             | THE PURPLE SALON                            | Haines Company            |
|             | RICHARDSON CLAY INS                         | Haines Company            |
|             | SILKY NAIL                                  | Haines Company            |
|             | BURRITO FACTORY                             | Haines Company            |
|             | GLORY CLEANERS                              | Haines Company            |
|             | CONNECTION                                  | Haines Company            |
|             | PAT S BIRD & PET                            | Haines Company            |
|             | LABLADHYAN ARTHUR                           | Haines Company            |
|             | GUIDO S PIZZA&PASTA M                       | Haines Company            |
| 1991        | Sunsations                                  | Pacific Bell              |
|             | Sill AJ                                     | Pacific Bell              |
|             | Silky Nail                                  | Pacific Bell              |
|             | Granada Hills                               | Pacific Bell              |
| 1980        | T & H AUTOMOTIVE                            | Pacific Telephone         |
|             | MOBIL SERVICE STATION DEALERS GRANADA HILLS | Pacific Telephone         |
| 1975        | San Fernando Mission BI & Woodley           | Pacific Telephone         |
| 1970        | MOBIL SERVICE STN DLRS                      | Pacific Telephone         |
|             | MOBIL SERVICE STN DLRS                      | Pacific Telephone         |
| 1962        | MOBIL SERV STN DLRS SAN<br>FERNANDO         | Pacific Telephone         |
| 1956        | GREGOS GORDON J SERV STN                    | Pacific Telephone         |
| 16157 SA    | N FERNANDO MISSION BLVD                     |                           |
| <u>Year</u> | <u>Uses</u>                                 | <u>Source</u>             |
| 2004        | GRIJALVASANDRA                              | Haines Company            |
| 1980        | RONS VALLEY REFRIGERATION                   | Pacific Telephone         |
| 1975        | Mission Barber Salon                        | Pacific Telephone         |
| 1970        | MISSION BARBER SALON                        | Pacific Telephone         |
|             | MISSION BARBER SALON                        | Pacific Telephone         |
| 1962        | BETTY MORGAN HAIR FASHIONS                  | Pacific Telephone         |
|             | MCADOO S BARBER SHOP                        | Pacific Telephone         |
| 16159 SA    | N FERNANDO MISSION BLVD                     |                           |
| <u>Year</u> | <u>Uses</u>                                 | <u>Source</u>             |
| 2008        | SUNSHINE FLOWERS                            | Cole Information Services |

| <u>Year</u> | <u>Uses</u>                                   | <u>Source</u>     |
|-------------|---|-------------------|
| 2004        | NORITAS FLOWER                                | Haines Company    |
|             | GIFT SHOP                                     | Haines Company    |
| 1980        | SATTLER ROLLIN A CUSTOM & COMMERCIAL PAINTING | Pacific Telephone |
| 1975        | SINGER ELECTRONICS                            | Pacific Telephone |
| 1970        | MY CLEANERS                                   | Pacific Telephone |
|             | MY CLEANERS                                   | Pacific Telephone |
| 1962        | LINDLEY CLEANERS                              | Pacific Telephone |

### 16161 SAN FERNANDO MISSION BLVD

| <u>Uses</u>                 | <u>Source</u>   |
|-----------------------------|---|
| CASA DE PIZZA               | Cole Information Services   |
| CASA DE PIZZA               | Cole Information Services   |
| no info                     | Haines Company  |
| Casa De Pizza               | Pacific Bell  |
| Casa De Pizza               | Pacific Bell  |
| CASA DE PIZZA GRANADA HILLS | Pacific Telephone   |
| CASA DE PIZZA               | Pacific Telephone   |
| CASA-DE-PIZZA               | Pacific Telephone   |
| CASA-DE-PIZZA               | Pacific Telephone   |
| CASA-DE-PIZZA               | Pacific Telephone   |
|                             | CASA DE PIZZA CASA DE PIZZA no info Casa De Pizza Casa De Pizza CASA DE PIZZA GRANADA HILLS CASA DE PIZZA CASA-DE-PIZZA CASA-DE-PIZZA |

## 16163 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                  | <u>Source</u>             |
|-------------|------------------------------|---------------------------|
| 2013        | HIGHLAND LIQUORS             | Cole Information Services |
| 2004        | JR MARKET                    | Haines Company            |
|             | HIGHLAND LIQUORS             | Haines Company            |
| 1991        | Highland Liquors & Jr Market | Pacific Bell              |
| 1980        | HIGHLAND LIQUORS & JR MARKET | Pacific Telephone         |
| 1975        | Highland Liquors & Jr Market | Pacific Telephone         |
| 1970        | SAROSE LIQUORS               | Pacific Telephone         |
|             | SAROSE LIQUORS               | Pacific Telephone         |
| 1962        | SAROSE LIQUORS OFC           | Pacific Telephone         |

# 16201 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>           | <u>Source</u>             |
|-------------|-----------------------|---------------------------|
| 2013        | ALBERTSONS            | Cole Information Services |
|             | WATERMILL EXPRESS INC | Cole Information Services |
| 2008        | ALBERTSONS SAVON      | Cole Information Services |
|             | SAV ON PHARMACY       | Cole Information Services |

| <u>Year</u> | <u>Uses</u>                    | <u>Source</u>             |
|-------------|--------------------------------|---------------------------|
| 2008        | SAV ON DRUGS                   | Cole Information Services |
|             | SAVON ALBERTSONS PHARMACY 6383 | Cole Information Services |
| 2004        | SAV ON PHARMACY                | Haines Company            |

### 16202 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>   | <u>Source</u>  |
|-------------|---------------|----------------|
| 2004        | no info       | Haines Company |
| 1991        | Granada Hills | Pacific Bell   |
|             | Pharmacy      | Pacific Bell   |

#### 16220 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>     |
|-------------|--------------|-------------------|
| 2004        | COSCIAJerry  | Haines Company    |
| 1985        | Coscia M     | Pacific Bell      |
|             | Coscia Jerry | Pacific Bell      |
| 1980        | COSCIL JERRY | Pacific Telephone |
| 1975        | Coscia Jerry | Pacific Telephone |
| 1970        | COSCIA JERRY | Pacific Telephone |
|             | COSCIA JERRY | Pacific Telephone |
| 1962        | CROWE VERA E | Pacific Telephone |

## 16228 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | no info         | Haines Company    |
| 1980        | BITTERMANN VINA | Pacific Telephone |
| 1975        | Wikum Phillip   | Pacific Telephone |
| 1962        | JUDEN JOS W     | Pacific Telephone |

## 16231 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                    | <u>Source</u>     |
|-------------|--------------------------------|-------------------|
| 2004        | no info                        | Haines Company    |
| 1975        | Granada Theatre                | Pacific Telephone |
| 1970        | LOEW S THEATRES WEST COAST DIV | Pacific Telephone |
|             | GRANADA THEATRE                | Pacific Telephone |
|             | LOEW S THEATRES WEST COAST DIV | Pacific Telephone |
|             | GRANADA THEATRE                | Pacific Telephone |

#### 16233 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>             |
|-------------|--|---------------------------|
| 2013        | GRANADA HILLS CLEANERS   | Cole Information Services |
| 2008        | GRANADA HILLS CLEANERS INC                                     | Cole Information Services |
| 2004        | CLEANER  | Haines Company            |
|             | GRANADAHLS   | Haines Company            |
| 1991        | Granada Hills Cleaners   | Pacific Bell              |
| 1980        | INFLECTIONS II   | Pacific Telephone         |
| 1975        | Inflections  | Pacific Telephone         |
| 1970        | STATE FARM INSURANCE COMPANIES<br>LOCAL AGENCIES GRANADA HILLS | Pacific Telephone         |
|             | STATE FARM INSURANCE COMPANIES<br>LOCAL AGENCIES GRANADA HILLS | Pacific Telephone         |
|             | FISH DON INS   | Pacific Telephone         |
|             | STATE FARM INSURANCE COMPANIES<br>LOCAL AGENCIES GRANADA HILLS | Pacific Telephone         |
|             | STATE FARM INSURANCE COMPANIES<br>LOCAL AGENCIES GRANADA HILLS | Pacific Telephone         |
|             | FISH DON INS   | Pacific Telephone         |
|             |  |                           |

### 16234 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>        | <u>Source</u> |
|-------------|--------------------|---------------|
| 1991        | Perez Raul & Maria | Pacific Bell  |

## 16235 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                          | <u>Source</u>             |
|-------------|--------------------------------------|---------------------------|
| 2013        | PRINCESS NAIL                        | Cole Information Services |
| 2008        | PRINCESS NAIL                        | Cole Information Services |
| 2004        | PRINCESS NAIL                        | Haines Company            |
| 1991        | Athletic X Press                     | Pacific Bell              |
|             | Athletic Way Sports Watches & Repair | Pacific Bell              |
| 1985        | Wallpaper Boutique                   | Pacific Bell              |
|             | Wallpaper By Don                     | Pacific Bell              |

### 16237 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>              | <u>Source</u>             |
|-------------|--------------------------|---------------------------|
| 2013        | GOLDEN WALL CHINESE FOOD | Cole Information Services |
| 2008        | GOLDEN WALL CHINESE FOOD | Cole Information Services |
| 2004        | GOLDEN WALL              | Haines Company            |
|             | CHINESE FOOD             | Haines Company            |
| 1985        | Super Hero Inc           | Pacific Bell              |
| 1980        | NEW FORTUNE COOKIE THE   | Pacific Telephone         |

| <u>Year</u>                     | <u>Uses</u>             | Source            |
|---------------------------------|-------------------------|-------------------|
| 1975                            | Jun Jun Kitchen         | Pacific Telephone |
| 1970                            | CHINA KITCHEN           | Pacific Telephone |
|                                 | CHINA KITCHEN           | Pacific Telephone |
| 16239 SA                        | N FERNANDO MISSION BLVD |                   |
| <u>Year</u>                     | <u>Uses</u>             | <u>Source</u>     |
| 1980                            | EHRLICH JEROME RL EST   | Pacific Telephone |
| 16240 SA                        | N FERNANDO MISSION BLVD |                   |
| <u>Year</u>                     | <u>Uses</u>             | <u>Source</u>     |
| 2004                            | SALLOOM Salim           | Haines Company    |
| 1980                            | RUSSELL MARA            | Pacific Telephone |
| 1975                            | Russell Mara            | Pacific Telephone |
| 1970                            | SHEPPARD AL             | Pacific Telephone |
|                                 | SHEPPARD AL             | Pacific Telephone |
| 1962                            | LAWRENCE ALTON I        | Pacific Telephone |
|                                 | JENSEN MURRAY A         | Pacific Telephone |
| 16241 SA                        | N FERNANDO MISSION BLVD |                   |
| <u>Year</u>                     | <u>Uses</u>             | <u>Source</u>     |
| 2004                            | no info                 | Haines Company    |
| 1985                            | Granada Hills           | Pacific Bell      |
| 16246 SA                        | N FERNANDO MISSION BLVD |                   |
| <u>Year</u>                     | <u>Uses</u>             | <u>Source</u>     |
| 2004                            | SHEVAVESH Teradej       | Haines Company    |
| 1980                            | TAUBER MARSHA           | Pacific Telephone |
| 1975                            | James Thos              | Pacific Telephone |
| 1970                            | PUCKETT PAUL            | Pacific Telephone |
|                                 | PUCKETT PAUL            | Pacific Telephone |
| 1962                            | O JEDA EVA              | Pacific Telephone |
| 16253 SAN FERNANDO MISSION BLVD |                         |                   |
| <u>Year</u>                     | <u>Uses</u>             | <u>Source</u>     |
| 1956                            | SCHMIDT OLIVE M R       | Pacific Telephone |
| 1950                            | SCHMIDT OLIVE M R       | Pacific Telephone |
|                                 | SCHMIDT OLIVE M R       | Pacific Telephone |
|                                 |                         |                   |

#### 16254 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>     |
|-------------|--------------------|-------------------|
| 2004        | SQRIJALVA Margaret | Haines Company    |
| 1985        | Grijalva Michael   | Pacific Bell      |
| 1980        | GRIJALVA MICHAEL   | Pacific Telephone |
| 1975        | Grijalva Michael   | Pacific Telephone |
| 1970        | GRIJALVA MICHAEL   | Pacific Telephone |
|             | GRIJALVA MICHAEL   | Pacific Telephone |
| 1962        | APPLING LAURECE    | Pacific Telephone |

### 16255 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                        | <u>Source</u>             |
|-------------|------------------------------------|---------------------------|
| 2008        | BIG LOTS                           | Cole Information Services |
|             | WATERMILL EXPRESS INC              | Cole Information Services |
| 2004        | BIGLOTS                            | Haines Company            |
| 1991        | Granada Hits                       | Pacific Bell              |
| 1980        | PIC N SAVE                         | Pacific Telephone         |
| 1975        | Granada Hills                      | Pacific Telephone         |
| 1970        | GRANT W T CO DEPT STRS DEPT STORES | Pacific Telephone         |
|             | PIC N SAVE NO 11                   | Pacific Telephone         |
|             | PIC N SAVE NO 11                   | Pacific Telephone         |
|             | GRANT W T CO DEPT STRS DEPT STORES | Pacific Telephone         |
| 1962        | HAHN E W INC                       | Pacific Telephone         |
|             | GRANT W T CO DEPT STORES           | Pacific Telephone         |

### 16261 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>             | <u>Source</u>             |
|-------------|-------------------------|---------------------------|
| 2008        | CORK N BIB LIQUOR STORE | Cole Information Services |

#### 16271 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u>                          | <u>Source</u>     |
|-------------|--------------------------------------|-------------------|
| 1975        | Mary Anns Hair Designs               | Pacific Telephone |
| 1970        | MURRE OF VALLEY VILLAGE CLNRS & DYRS | Pacific Telephone |
|             | MURRE OF VALLEY VILLAGE CLNRS & DYRS | Pacific Telephone |

### 16273 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | no info     | Haines Company |

<u>Source</u>

Pacific Telephone

| 1975                                | Yamashiro Plumbing & Heating Co | Pacific Telephone         |
|-------------------------------------|---------------------------------|---------------------------|
| 16281 SA                            | N FERNANDO MISSION BLVD         |                           |
| <u>Year</u>                         | <u>Uses</u>                     | Source                    |
| 2013                                | JAY B MADHURE MD                | Cole Information Services |
|                                     | PREMIER BUSINESS                | Cole Information Services |
| 2008                                | CARVEL ICE CREAM                | Cole Information Services |
| 2004                                | ADVANCEDPC                      | Haines Company            |
| 1991                                | Mail Boxes Etc                  | Pacific Bell              |
| 16310 SA                            | N FERNANDO MISSION BLVD         |                           |
| <u>Year</u>                         | <u>Uses</u>                     | Source                    |
| 2004                                | LEVYllan                        | Haines Company            |
| 1956                                | CORNELL REGINALD                | Pacific Telephone         |
| 16311 SA                            | N FERNANDO MISSION BLVD         |                           |
| <u>Year</u>                         | <u>Uses</u>                     | <u>Source</u>             |
| 2004                                | GLARES Francisco                | Haines Company            |
| 1991                                | Makay Josef M                   | Pacific Bell              |
|                                     | Makay Marvin & Patricia GHis    | Pacific Bell              |
|                                     | Makay P GHIs                    | Pacific Bell              |
|                                     | Makdessian Berjouhi             | Pacific Bell              |
| 1980                                | MAKAY JOSEF M                   | Pacific Telephone         |
| 1975                                | Makay Josef M                   | Pacific Telephone         |
| 1970                                | MAKAY JOSEF M                   | Pacific Telephone         |
|                                     | MAKAY JOSEF M                   | Pacific Telephone         |
| 1962                                | MAKAY JOSEF M                   | Pacific Telephone         |
| 16319 SA                            | N FERNANDO MISSION BLVD         |                           |
| <u>Year</u>                         | <u>Uses</u>                     | <u>Source</u>             |
| 2013                                | JRW CONSULTING SERVICES INC     | Cole Information Services |
| 1980                                | RODRIGUEZ MANUEL                | Pacific Telephone         |
| 1975                                | Rodriguez Manuel                | Pacific Telephone         |
| 1970                                | LEIKER REINOLD                  | Pacific Telephone         |
|                                     | LEIKER REINOLD                  | Pacific Telephone         |
| 1962                                | MARCINKO ANDREW M               | Pacific Telephone         |
| 16271 1/2 SAN FERNANDO MISSION BLVD |                                 |                           |
| <u>Year</u>                         | <u>Uses</u>                     | Source                    |

<u>Year</u>

1980

MARY ANN S

<u>Uses</u>

| <u>Year</u> | <u>Uses</u>                   | <u>Source</u>     |
|-------------|-------------------------------|-------------------|
| 1980        | NICK & MARY ANNS HAIR DESIGNS | Pacific Telephone |
| 1970        | BUDGET BEAUTY SALON           | Pacific Telephone |
|             | BUDGET BEAUTY SALON           | Pacific Telephone |
|             | MARY ANN S HAIR DESIGNS       | Pacific Telephone |
|             | MARY ANN S HAIR DESIGNS       | Pacific Telephone |

#### 16273 3/4 SAN FERNANDO MISSION BLVD

| <u>Year</u> | <u>Uses</u> | <u>Source</u> |
|-------------|-------------|---------------|
|             |             |               |

# 1980 LAYLAND DAVID Pacific Telephone

## SAN FERNANDO MISSION RD

## 16156-2 SAN FERNANDO MISSION RD

| <u>Year</u> | <u>Uses</u>                                | <u>Source</u> |
|-------------|--|---------------|
| 1990        | ALLSTATE INSURANCE COMPANIES SALES OFFICES | Pacific Bell  |

# **SWINTON AVE**

## 11008 SWINTON AVE

| <u>Year</u> | <u>Uses</u>      | <u>Source</u>             |
|-------------|------------------|---------------------------|
| 2008        | RICHARD BERRYMAN | Cole Information Services |
| 2004        | BERRYMAN Richard | Haines Company            |
| 1975        | Mc Guire Jas A   | Pacific Telephone         |

#### 11012 SWINTON AVE

| <u>Year</u> | <u>Uses</u>                       | <u>Source</u>     |
|-------------|-----------------------------------|-------------------|
| 2004        | SPEREACheryl                      | Haines Company    |
| 1975        | Renta Vincent                     | Pacific Telephone |
|             | Renta Yenta PO Box 415 Tarz       | Pacific Telephone |
|             | Rental Daily News advg & publctns | Pacific Telephone |

### 11018 SWINTON AVE

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 2004        | SORCSEKJerome     | Haines Company    |
| 1985        | Wilson Michael L  | Pacific Bell      |
| 1975        | Gottschalk Walter | Pacific Telephone |

### 11024 SWINTON AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | SMOLIKJohn  | Haines Company |

#### 11032 SWINTON AVE

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>             |
|-------------|-----------------|---------------------------|
| 2013        | SKYNET COMPUTER | Cole Information Services |

2004 no info Haines Company

## 11036 SWINTON AVE

| <u>Year</u> | <u>Uses</u>         | <u>Source</u>     |
|-------------|---------------------|-------------------|
| 2004        | OESTRADASalvador E  | Haines Company    |
| 1985        | Florence Boyd G     | Pacific Bell      |
| 1975        | Willingham Eugene H | Pacific Telephone |

## 11040 SWINTON AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u>     |
|-------------|-------------|-------------------|
| 2004        | ORTIZJose   | Haines Company    |
| 1975        | Cox Paul R  | Pacific Telephone |

#### 11043 SWINTON AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | OBRADLEYOdando | Haines Company    |
| 1975        | France Joanne  | Pacific Telephone |
|             | France Geo     | Pacific Telephone |

#### 11044 SWINTON AVE

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>     |
|-------------|--------------------|-------------------|
| 2004        | no info            | Haines Company    |
| 1975        | Diefenderfer Geo D | Pacific Telephone |

## 11049 SWINTON AVE

| <u>Year</u> | <u>Uses</u>       | <u>Source</u>     |
|-------------|-------------------|-------------------|
| 2004        | no info           | Haines Company    |
| 1985        | Harrison Lathy    | Pacific Bell      |
|             | Harrison Laurie   | Pacific Bell      |
| 1975        | Johnson Frederick | Pacific Telephone |

## 11050 SWINTON AVE

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | HOGAN Jerry     | Haines Company    |
|             | VACARafael      | Haines Company    |
| 1975        | Beccue Lester O | Pacific Telephone |

#### 11055 SWINTON AVE

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>     |
|-------------|-----------------|-------------------|
| 2004        | OKAURKanwa Ijit | Haines Company    |
|             | SINGH Darshan   | Haines Company    |
| 1991        | Bradley Hugh    | Pacific Bell      |
| 1985        | Bradley Hugh    | Pacific Bell      |
| 1975        | Bradley Hugh    | Pacific Telephone |
|             |                 |                   |

#### 11056 SWINTON AVE

| <u>Year</u> | <u>Uses</u>      | <u>Source</u>     |
|-------------|------------------|-------------------|
| 2004        | MATTSONLuher J   | Haines Company    |
| 1991        | Mattson Luther J | Pacific Bell      |
| 1985        | Mattson Luther J | Pacific Bell      |
| 1975        | Mattson Luther J | Pacific Telephone |
|             |                  |                   |

#### 11061 SWINTON AVE

| <u>Year</u> | <u>Uses</u>               | <u>Source</u>             |
|-------------|---------------------------|---------------------------|
| 2013        | CREATIVE FIRE CLAY STUDIO | Cole Information Services |
| 2008        | CREATIVE FIRE CLAY STUDIO | Cole Information Services |
| 2004        | DUBE Howard               | Haines Company            |

#### 11062 SWINTON AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | SREYESEfren | Haines Company |

# **WOODLEY AVE**

## 11006 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>           | <u>Source</u>             |
|-------------|-----------------------|---------------------------|
| 2008        | SVETLANA ZHURAUSKAYA  | Cole Information Services |
| 2004        | KORENOVSKYZenovi      | Haines Company            |
| 1991        | Bettino John & Elaine | Pacific Bell              |
|             | Bettino Virginia I    | Pacific Bell              |
|             | Bettini Stephen       | Pacific Bell              |
| 1975        | Gamaza Manuel J       | Pacific Telephone         |
|             |                       |                           |

## 11007 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | SESTEVEZSandra | Haines Company    |
| 1975        | Lewellen Don   | Pacific Telephone |

#### 11012 WOODLEY AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u> |
|-------------|-------------|---------------|
| 2004        | no info     | Haines (      |

2004 no info
 Haines Company
 1975 Alexander Gorden L
 Pacific Telephone

## 11013 WOODLEY AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u> |
|-------------|-------------|---------------|
|-------------|-------------|---------------|

2004 SHROYERRina Haines Company 1975 Shroyer Ralph L Pacific Telephone

### 11018 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>          | <u>Source</u>     |
|-------------|----------------------|-------------------|
| 2004        | OGDENRM              | Haines Company    |
| 1985        | Circle E Enterprises | Pacific Bell      |
| 1975        | Ogden Rolland M      | Pacific Telephone |

#### 11019 WOODLEY AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u>     |
|-------------|-------------|-------------------|
| 2004        | ALARCONUno  | Haines Company    |
| 1975        | Matheson H  | Pacific Telephone |

#### 11022 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>         | <u>Source</u>     |
|-------------|---------------------|-------------------|
| 2004        | CASTILLOEIren       | Haines Company    |
| 1991        | Garnache John       | Pacific Bell      |
| 1985        | Vantook Fang        | Pacific Bell      |
|             | Van Tongeren John   | Pacific Bell      |
|             | Garnache John       | Pacific Bell      |
| 1975        | Fullerton Wallace D | Pacific Telephone |

### 11025 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>  |
|-------------|--------------|----------------|
| 2004        | HERRERAJulia | Haines Company |

## 11028 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>  |
|-------------|--------------|----------------|
| 2004        | AMOUR Lauren | Haines Company |

#### 11031 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>  |
|-------------|----------------|----------------|
| 2004        | SHRUM Thomas   | Haines Company |
| 1985        | Hansen Frank T | Pacific Bell   |

| <u>Year</u>                 | <u>Uses</u>   | <u>Source</u>   |
|-----------------------------|---|---|
| 1975                        | Hansen Frank T  | Pacific Telephone   |
| 11034 WC                    | ODLEY AVE   |   |
| <u>Year</u>                 | <u>Uses</u>   | <u>Source</u>   |
| 2004                        | SASJohn E   | Haines Company  |
| 1985                        | Sas John E  | Pacific Bell  |
| 1975                        | Sas John E  | Pacific Telephone   |
| 11037 WC                    | OODLEY AVE  |   |
| <u>Year</u>                 | <u>Uses</u>   | <u>Source</u>   |
| 2004                        | OPALMERSam I  | Haines Company  |
| 1991                        | Palmer Sam I  | Pacific Bell  |
| 1975                        | Palmer Saml   | Pacific Telephone   |
| 11043 WC                    | OODLEY AVE  |   |
| <u>Year</u>                 | <u>Uses</u>   | <u>Source</u>   |
| 2004                        | GARCIARudy  | Haines Company  |
| 1985                        | Garcia Rudy Jr  | Pacific Bell  |
| 1975                        | Glenn John  | Pacific Telephone   |
|                             |   |   |
| 11050 WC                    | OODLEY AVE  |   |
| 11050 WC                    | OODLEY AVE <u>Uses</u>  | Source  |
|                             |   | Source Cole Information Services  |
| <u>Year</u>                 | <u>Uses</u>   |   |
| <u>Year</u>                 | <u>Uses</u><br>ACE SERVICE CENTER   | Cole Information Services   |
| <u>Year</u>                 | Uses ACE SERVICE CENTER R & G RACING  | Cole Information Services Cole Information Services   |
| <u>Year</u>                 | Uses  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  | Cole Information Services Cole Information Services Cole Information Services   |
| <u>Year</u>                 | Uses  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC   | Cole Information Services Cole Information Services Cole Information Services Cole Information Services   |
| <u>Year</u><br>2013         | Uses  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT   | Cole Information Services   |
| <u>Year</u><br>2013         | Uses  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS   | Cole Information Services   |
| <u>Year</u><br>2013         | Uses  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG   | Cole Information Services   |
| <u>Year</u><br>2013         | USES  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG  ACE SERVICE CENTER  WASTE MANAGEMENT OF ALAMEDA  | Cole Information Services   |
| <u>Year</u><br>2013<br>2008 | Uses  ACE SERVICE CENTER R & G RACING GRANADA HILLS TEST ONLY SMOG RANDYS TOWING INC WASTE MANAGEMENT LUXURY AUDIO DESIGNS GRANADA HILLS TEST ONLY SMOG ACE SERVICE CENTER WASTE MANAGEMENT OF ALAMEDA COUNTY I   | Cole Information Services   |
| <u>Year</u><br>2013<br>2008 | USES  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG  ACE SERVICE CENTER  WASTE MANAGEMENT OF ALAMEDA COUNTY I  GRANADA HILLS  | Cole Information Services Haines Company  |
| <u>Year</u><br>2013<br>2008 | USES  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG  ACE SERVICE CENTER  WASTE MANAGEMENT OF ALAMEDA COUNTY I  GRANADA HILLS  ACE SERVICE CENTER                            | Cole Information Services Haines Company Haines Company                               |
| <u>Year</u><br>2013<br>2008 | USES  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG  ACE SERVICE CENTER  WASTE MANAGEMENT OF ALAMEDA COUNTY I  GRANADA HILLS  ACE SERVICE CENTER  CENTER                    | Cole Information Services Haines Company Haines Company Haines Company                |
| <u>Year</u><br>2013<br>2008 | USES  ACE SERVICE CENTER  R & G RACING  GRANADA HILLS TEST ONLY SMOG  RANDYS TOWING INC  WASTE MANAGEMENT  LUXURY AUDIO DESIGNS  GRANADA HILLS TEST ONLY SMOG  ACE SERVICE CENTER  WASTE MANAGEMENT OF ALAMEDA COUNTY I  GRANADA HILLS  ACE SERVICE CENTER  CENTER  7 DAYS AUTOMOTIVE | Cole Information Services Haines Company Haines Company Haines Company Haines Company |

### 11101 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>                | <u>Source</u>             |
|-------------|----------------------------|---------------------------|
| 2013        | TACO BELL                  | Cole Information Services |
| 2008        | MILLENNIUM TACOS INC       | Cole Information Services |
|             | TACO BELL OF GRANADA HILLS | Cole Information Services |
|             | TACO BELL                  | Cole Information Services |
| 2004        | TACOBELL                   | Haines Company            |

#### 11116 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>        | <u>Source</u>     |
|-------------|--------------------|-------------------|
| 2004        | REEDReno           | Haines Company    |
| 1991        | Cannon Peggy       | Pacific Bell      |
|             | Cannon Power Tools | Pacific Bell      |
| 1985        | Cannon Peggy       | Pacific Bell      |
| 1975        | Cannon Peggy       | Pacific Telephone |

### 11122 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>            | <u>Source</u>     |
|-------------|------------------------|-------------------|
| 2004        | FLECKLynne             | Haines Company    |
| 1991        | Fleck Lynne            | Pacific Bell      |
| 1985        | Fleck Lynne            | Pacific Bell      |
|             | Fleck Michael & Sharon | Pacific Bell      |
| 1975        | Fleck Allan            | Pacific Telephone |
|             | Hickory Plague Co Inc  | Pacific Telephone |

## 11128 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>     | <u>Source</u>  |
|-------------|-----------------|----------------|
| 2004        | AYOUBSahlieh N  | Haines Company |
| 1991        | Statti Albert J | Pacific Bell   |

### 11134 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | OWASIFI Nazifi | Haines Company    |
|             | SWASIFI Waheed | Haines Company    |
| 1991        | Katz Harold    | Pacific Bell      |
|             | Katz Harriet   | Pacific Bell      |
|             | Katz Harriet   | Pacific Bell      |
| 1975        | Chaffee Roland | Pacific Telephone |

#### 11135 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>                | <u>Source</u>             |
|-------------|----------------------------|---------------------------|
| 2013        | TOUCH UP LILY BEAUTY SALON | Cole Information Services |
| 2008        | WEST COAST CUTS & COLORS   | Cole Information Services |
| 2004        | FANTASTICSAMS              | Haines Company            |

## 11137 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>             |
|-------------|--|---------------------------|
| 2013        | MIGHTY MOUTH BURGERS                                 | Cole Information Services |
| 2008        | MIGHTY MOUTH BURGERS                                 | Cole Information Services |
| 2004        | MIGHTYMOUTH  | Haines Company            |
|             | BURGERS  | Haines Company            |
| 1991        | Sports Cafe  | Pacific Bell              |
|             | Sports Call LA There Is A Charge To Dial This Number | Pacific Bell              |

## 11139 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>                  |         | <u>Source</u>             |
|-------------|------------------------------|---------|---------------------------|
| 2008        | PROCORP INC                  |         | Cole Information Services |
| 2004        | CRUISES&TOURS                |         | Haines Company            |
|             | DOLPHIN                      |         | Haines Company            |
| 1990        | HENDRICKSON RON INS<br>HILLS | GRANADA | Pacific Bell              |

## 11140 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>     |
|-------------|--------------|-------------------|
| 2004        | PROTHODwight | Haines Company    |
| 1975        | Valenti BI L | Pacific Telephone |

### 11141 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>                    | <u>Source</u>             |
|-------------|--------------------------------|---------------------------|
| 2013        | 3 DAY FLOORING                 | Cole Information Services |
| 2008        | CITYWIDE REAL ESTATE GROUP INC | Cole Information Services |
|             | ARTHURS FLOORING               | Cole Information Services |
| 2004        | BENCORE                        | Haines Company            |
|             | INVESTMENTS                    | Haines Company            |

### 11143 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>             |
|-------------|----------------|---------------------------|
| 2013        | CHEN SHANNA DR | Cole Information Services |
| 2008        | CHEN SHANNA DR | Cole Information Services |

Haines Company

Haines Company

Pacific Telephone

| <u>Year</u>   | <u>Uses</u>   | Source  |
|---|---|---|
| 2008  | GRANADA HILLS ACUPUNCTURE & HERBS   | Cole Information Services   |
| 2004  | no info   | Haines Company  |
| 1995  | Beck Travel   | Pacific Bell  |
| 1991  | BE CK TRAVE L   | Pacific Bell  |
| 1985  | Beck Travel   | Pacific Bell  |
| 11145 WC  | OODLEY AVE  |   |
| <u>Year</u>   | <u>Uses</u>   | <u>Source</u>   |
| 2013  | CHECK INTO CASH   | Cole Information Services   |
| 11146 WC  | OODLEY AVE  |   |
| <u>Year</u>   | <u>Uses</u>   | <u>Source</u>   |
| 2004  | CHECKINTOCASH   | Haines Company  |
|   | OABUGAYDAJose   | Haines Company  |
| 1975  | Downing Jas A   | Pacific Telephone   |
| 11147 WC  | OODLEY AVE  |   |
|   |   |   |
| <u>Year</u>   | <u>Uses</u>   | <u>Source</u>   |
| <u><b>Year</b></u><br>2008                                | <u>Uses</u><br>RANGE REALTY   | <b>Source</b> Cole Information Services   |
|   |   |   |
|   | RANGE REALTY  | Cole Information Services   |
| 2008  | RANGE REALTY 4X PROJECTS CO   | Cole Information Services Cole Information Services   |
| 2008  | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO   | Cole Information Services Cole Information Services Haines Company  |
| 2008<br>2004<br>1991                                      | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY   | Cole Information Services Cole Information Services Haines Company Haines Company   |
| 2008<br>2004<br>1991                                      | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  | Cole Information Services Cole Information Services Haines Company Haines Company   |
| 2008<br>2004<br>1991<br><b>11149 WC</b>                   | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODDLEY AVE  | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  |
| 2008 2004 1991 11149 WC <u>Year</u>                       | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODLEY AVE  Uses   | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source  |
| 2008 2004 1991 11149 WC Year 2013                         | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODLEY AVE  Uses  MOODY DAVID G DDS  | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source Cole Information Services  |
| 2008  2004  1991  11149 WC <u>Year</u> 2013  2008  2004   | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODLEY AVE  Uses  MOODY DAVID G DDS  DAVID G MOODY DDS                                   | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source Cole Information Services Cole Information Services                |
| 2008  2004  1991  11149 WC <u>Year</u> 2013  2008  2004   | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODLEY AVE  Uses  MOODY DAVID G DDS  DAVID G MOODY DDS  MOODYDAVID GDDS                  | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source Cole Information Services Cole Information Services                |
| 2008 2004 1991 11149 WC Year 2013 2008 2004 11151 WC      | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  PODLEY AVE  Uses  MOODY DAVID G DDS  DAVID G MOODY DDS  MOODYDAVID GDDS                 | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source Cole Information Services Cole Information Services Haines Company |
| 2008 2004 1991 11149 WC Year 2013 2008 2004 11151 WC Year | RANGE REALTY  4X PROJECTS CO  4 XPROJECTSCO  RANGE REALTY  CPR Computer Repair  ODLEY AVE  Uses  MOODY DAVID G DDS  DAVID G MOODY DDS  MOODYDAVID GDDS  ODLEY AVE  Uses | Cole Information Services Cole Information Services Haines Company Haines Company Pacific Bell  Source Cole Information Services Cole Information Services Haines Company |

2004

1975

CENTL VALLEY LOCK

& KEY

Humpers M C

#### 11152 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>           | <u>Source</u>     |
|-------------|-----------------------|-------------------|
| 2004        | CARRANZA Maria Teresa | Haines Company    |
|             | RODRIGUEZ Irene       | Haines Company    |
| 1985        | Romero Henry J        | Pacific Bell      |
| 1975        | Romero Henry J        | Pacific Telephone |

### 11154 WOODLEY AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u> |
|-------------|-------------|---------------|
| 1985        | Simard Ruth | Pacific Bell  |
|             | Simard S    | Pacific Bell  |

## 11155 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>                | <u>Source</u>             |
|-------------|----------------------------|---------------------------|
| 2013        | WORLD SERIES BATTING       | Cole Information Services |
| 2008        | 39 SCHOOL OF BASEBALL      | Cole Information Services |
|             | WORLD SERIES BATTING RANGE | Cole Information Services |

## 11158 WOODLEY AVE

| <u>Year</u> | <u>Uses</u> | <u>Source</u>  |
|-------------|-------------|----------------|
| 2004        | no info     | Haines Company |

#### 11165 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>  | <u>Source</u>  |
|-------------|--------------|----------------|
| 2004        | WORLD SERIES | Haines Company |
|             | 39 SCHOOL OF | Haines Company |
|             | BASEBALL     | Haines Company |
|             | BATTNG       | Haines Company |

### 11200 WOODLEY AVE

| <u>Year</u> | <u>Uses</u>    | <u>Source</u>     |
|-------------|----------------|-------------------|
| 2004        | WIBOWOFranky   | Haines Company    |
|             | &LUKMANHanry   | Haines Company    |
|             | HARJANTOSelly  | Haines Company    |
| 1985        | Carrello Mario | Pacific Bell      |
| 1975        | Linville L L   | Pacific Telephone |

## TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

| Address Researched                 | Address Not Identified in Research Source   |
|------------------------------------|---|
| 16225 San Fernando Mission<br>Blvd | 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1986, 1981, 1976, 1972, 1971, 1969, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, |
|                                    | 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920  |

## ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

| Address Researched | Address Not Identified in Research Source  |
|--------------------|--|
| 11006 WOODLEY AVE  | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11006 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11007 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11008 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11008 SWINTON AVE  | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11012 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11012 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

| Address Researched | Address Not Identified in Research Source  |
|--------------------|--|
| 11013 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11018 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11018 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11019 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11022 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11024 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11025 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11028 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11031 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11032 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11032 SWINTON AVE  | 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

| Address Researched | Address Not Identified in Research Source  |
|--------------------|--|
| 11034 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11036 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11037 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11040 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11043 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11043 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11044 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11049 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11050 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11050 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11050 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

| Address Researched | Address Not Identified in Research Source  |
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| 11055 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11056 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11061 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11061 SWINTON AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11062 SWINTON AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11101 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11101 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11116 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11122 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11123 COLLETT AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 11128 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

| Address Researched | Address Not Identified in Research Source  |
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| 11129 COLLETT AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11130 COLLETT AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                                     |
| 11133 COLLETT AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 11133 COLLETT AVE  | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11134 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11135 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11135 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11137 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11137 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11138 COLLETT AVE  | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11139 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

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|--------------------|--|
| 11139 WOODLEY AVE  | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11140 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11141 COLLETT AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                                     |
| 11141 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11141 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11143 WOODLEY AVE  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11143 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 11145 WOODLEY AVE  | 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11146 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11147 WOODLEY AVE  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11147 WOODLEY AVE  | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 11149 WOODLEY AVE                  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11149 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11151 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11151 WOODLEY AVE                  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11152 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 11154 WOODLEY AVE                  | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11155 WOODLEY AVE                  | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 11158 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11165 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 11200 WOODLEY AVE                  | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 16105 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

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| 16106 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16107 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16112 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 16115 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16118 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16121 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16124 SAN FENDO MISSION<br>BLVD    | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16124 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16127 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16130 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16131 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |

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| 16137 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16138 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16138 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16140 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16143 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16151 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16151 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16153 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16153 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16155 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16155 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

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| 16156 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16156 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                                     |
| 16156-2 SAN FERNANDO<br>MISSION RD | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16157 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16159 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16159 SAN FERNANDO<br>MISSION BLVD | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16161 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16161 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                                     |
| 16163 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16163 SAN FERNANDO<br>MISSION BLVD | 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16201 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

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| 16201 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16202 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16220 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16228 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16230 HORACE ST                    | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16231 HORACE ST                    | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 16231 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 16233 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16233 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16234 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16235 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |

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| 16235 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16237 SAN FERNANDO<br>MISSION BLVD | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16237 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16238 HORACE ST                    | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16239 HORACE ST                    | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16239 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16240 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16241 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16244 HORACE ST                    | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16245 HORACE ST                    | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920             |
| 16245 HORACE ST                    | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

| Address Researched                     | Address Not Identified in Research Source  |
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| 16246 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                         |
| 16253 HORACE ST                        | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16253 HORACE ST                        | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16253 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16254 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16255 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16255 SAN FERNANDO<br>MISSION BLVD     | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16256 HORACE ST                        | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16261 SAN FERNANDO<br>MISSION BLVD     | 2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16271 1/2 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16271 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |

| Address Researched                     | Address Not Identified in Research Source  |
|--|--|
| 16273 3/4 SAN FERNANDO<br>MISSION BLVD | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |
| 16273 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16281 SAN FERNANDO<br>MISSION BLVD     | 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16281 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16310 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920       |
| 16311 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                               |
| 16319 SAN FERNANDO<br>MISSION BLVD     | 2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920                   |
| 16319 SAN FERNANDO<br>MISSION BLVD     | 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920 |

3436

16225 San Fernando Mission Blvd Granada Hills, CA 91344

Inquiry Number: 4535889.9

February 11, 2016

# The EDR Aerial Photo Decade Package



# **EDR Aerial Photo Decade Package**

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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with any questions or comments.

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# **Date EDR Searched Historical Sources:**

Aerial Photography February 11, 2016

# **Target Property:**

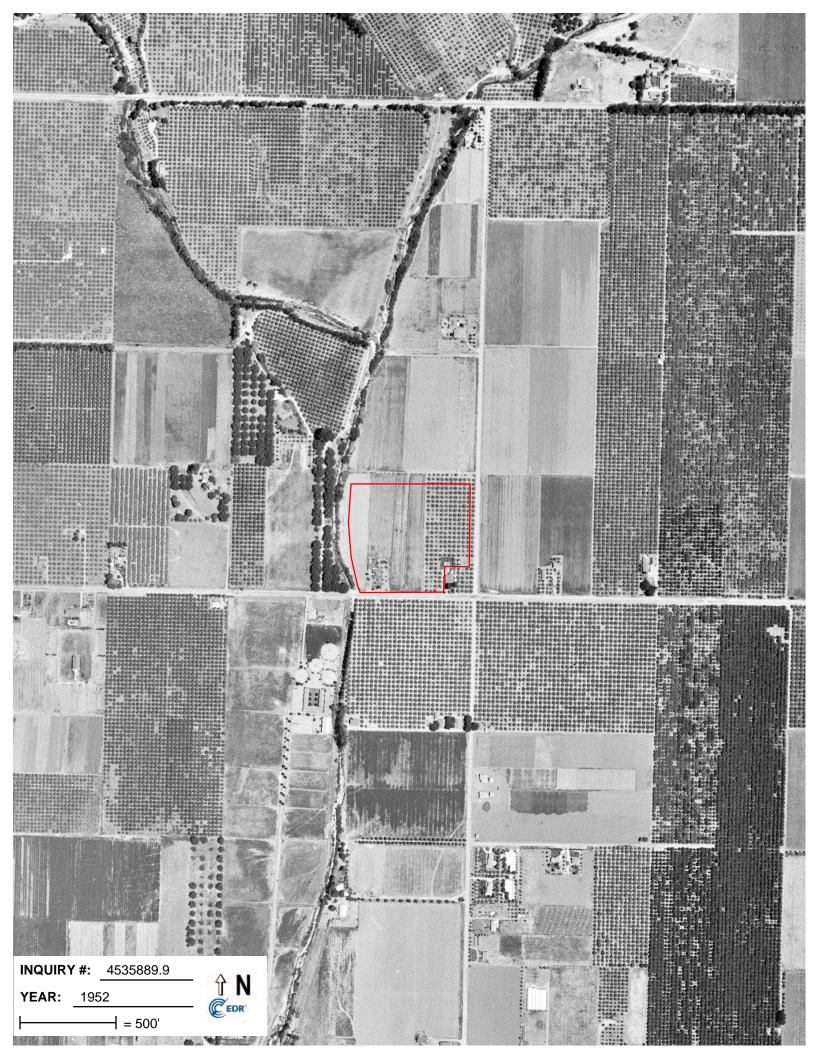
16225 San Fernando Mission Blvd Granada Hills, CA 91344

| <u>Year</u> | <u>Scale</u>                      | <u>Details</u>                  | <u>Source</u>                    |
|-------------|-----------------------------------|---------------------------------|----------------------------------|
| 1928        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1928               | USGS                             |
| 1938        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1938               | USGS                             |
| 1947        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1947               | USGS                             |
| 1952        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1952               | USGS                             |
| 1964        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1964               | USGS                             |
| 1969        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1969               | USGS                             |
| 1972        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1972               | EDR Proprietary Brewster Pacific |
| 1977        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1977               | EDR Proprietary Brewster Pacific |
| 1981        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1981               | EDR Proprietary Brewster Pacific |
| 1989        | Aerial Photograph. Scale: 1"=500' | Flight Year: 1989               | USGS                             |
| 1994        | Aerial Photograph. Scale: 1"=500' | /DOQQ - acquisition dates: 1994 | USGS/DOQQ                        |
| 2002        | Aerial Photograph. Scale: 1"=500' | Flight Year: 2002               | USGS                             |
| 2005        | Aerial Photograph. Scale: 1"=500' | Flight Year: 2005               | USDA/NAIP                        |
| 2009        | Aerial Photograph. Scale: 1"=500' | Flight Year: 2009               | USDA/NAIP                        |
| 2010        | Aerial Photograph. Scale: 1"=500' | Flight Year: 2010               | USDA/NAIP                        |
| 2012        | Aerial Photograph. Scale: 1"=500' | Flight Year: 2012               | USDA/NAIP                        |



















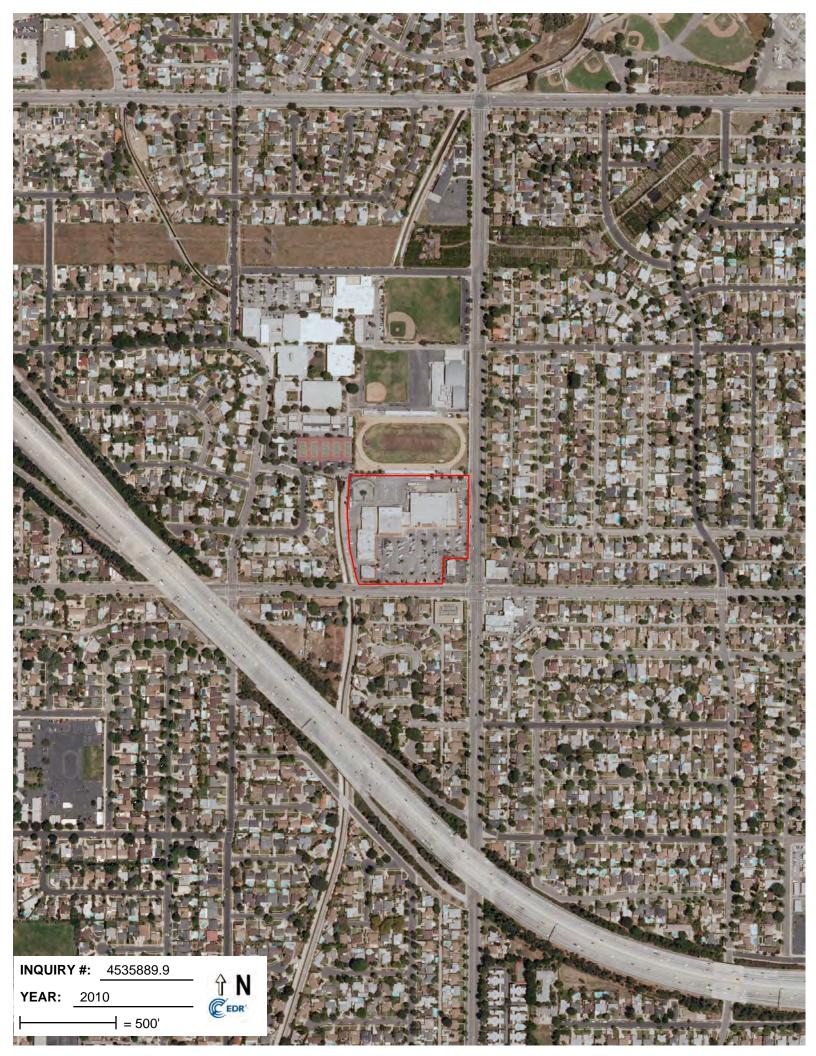














## 3436

16225 San Fernando Mission Blvd Granada Hills, CA 91344

Inquiry Number: 4535889.3

February 10, 2016

# Certified Sanborn® Map Report



# **Certified Sanborn® Map Report**

2/10/16

Site Name: Client Name:

3436 California Environmental 16225 San Fernando Mission 30423 Canwood Street Suite Granada Hills, CA 91344 Agoura Hills, CA 93012

EDR Inquiry # 4535889.3 Contact: Ryan Bzoskie



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

### Certified Sanborn Results:

Site Name: 3436

Address: 16225 San Fernando Mission Blvd

City, State, Zip: Granada Hills, CA 91344

**Cross Street:** 

**P.O.** # NA **Project:** 3436

Certification # DF95-493F-9FFF



Sanborn® Library search results Certification # DF95-493F-9FFF

## **UNMAPPED PROPERTY**

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

✓ University Publications of America

▼ EDR Private Collection

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3436 16225 San Fernando Mission Blvd Granada Hills, CA 91344

Inquiry Number: 4535889.4

February 10, 2016

# **EDR Historical Topo Map Report**

with QuadMatch™



# **EDR Historical Topo Map Report**

02/10/16

Site Name: Client Name:

3436 California Environmental

16225 San Fernando Mission E 30423 Canwood Street Suite 208

Granada Hills, CA 91344 Agoura Hills, CA 93012 EDR Inquiry # 4535889.4 Contact: Ryan Bzoskie EDR

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by California Environmental were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

## Search Results: Coordinates:

**Site Name:** 3436 **Latitude:** 34.272795 34° 16' 22" North

Address: 16225 San Fernando Mission E Longitude: -118.485753 -118° 29' 9" West

City, State, Zip: Granada Hills, CA 91344 UTM Zone: Zone 11 North

P.O.# NA UTM X Meters: 363228.43

Project: 3436 UTM Y Meters: 3793402.38

**Elevation**: 960.00' above sea level

### Maps Provided:

2012 1927, 1928

1995 1900

1988 1972

1966, 1967, 1969

1952, 1953

1943, 1944, 1945

1940, 1941

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## Topo Sheet Thumbnails

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets



San Fernando 2012 7.5-minute, 24000



Canoga Park 2012 7.5-minute, 24000



Van Nuys 2012 7.5-minute, 24000



Oat Mountain 2012 7.5-minute, 24000

#### 1995 Source Sheets



San Fernando 1995 7.5-minute, 24000 Aerial Photo Revised 1993

### 1988 Source Sheets



San Fernando 1988 7.5-minute, 24000 Photo Revised 1988 Aerial Photo Revised 1985

## 1972 Source Sheets



Van Nuys 1972 7.5-minute, 24000 Photo Revised 1972 Aerial Photo Revised 1972



San Fernando 1972 7.5-minute, 24000 Photo Revised 1972 Aerial Photo Revised 1972

## Topo Sheet Thumbnails

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1966, 1967, 1969 Source Sheets



San Fernando 1966 7.5-minute, 24000 Aerial Photo Revised 1964



Van Nuys 1966 7.5-minute, 24000 Aerial Photo Revised 1964 Edited 1953



Canoga Park 1967 7.5-minute, 24000 Photo Revised 1967 Aerial Photo Revised 1967



Oat Mountain 1969 7.5-minute, 24000 Photo Revised 1969 Aerial Photo Revised 1969

## 1952, 1953 Source Sheets



Oat Mountain 1952 7.5-minute, 24000 Aerial Photo Revised 1947



Canoga Park 1952 7.5-minute, 24000 Aerial Photo Revised 1947



San Fernando 1953 7.5-minute, 24000 Aerial Photo Revised 1952



Van Nuys 1953 7.5-minute, 24000 Aerial Photo Revised 1952

## 1943, 1944, 1945 Source Sheets



Santa Susana 1943 15-minute, 62500 Aerial Photo Revised 1938



Calabasas 1944 15-minute, 62500 Aerial Photo Revised 1938



San Fernando 1945 15-minute, 62500 Aerial Photo Revised 1940

### 1940, 1941 Source Sheets



San Fernando 1940 15-minute, 62500 Aerial Photo Revised 1940



Santa Susana 1941 15-minute, 62500 Aerial Photo Revised 1938

## **Topo Sheet Thumbnails**

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

## 1927, 1928 Source Sheets



Pacoima 1927 7.5-minute, 24000

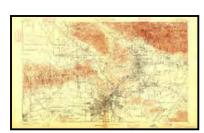


Zelzah 1928 7.5-minute, 24000

## 1900 Source Sheets



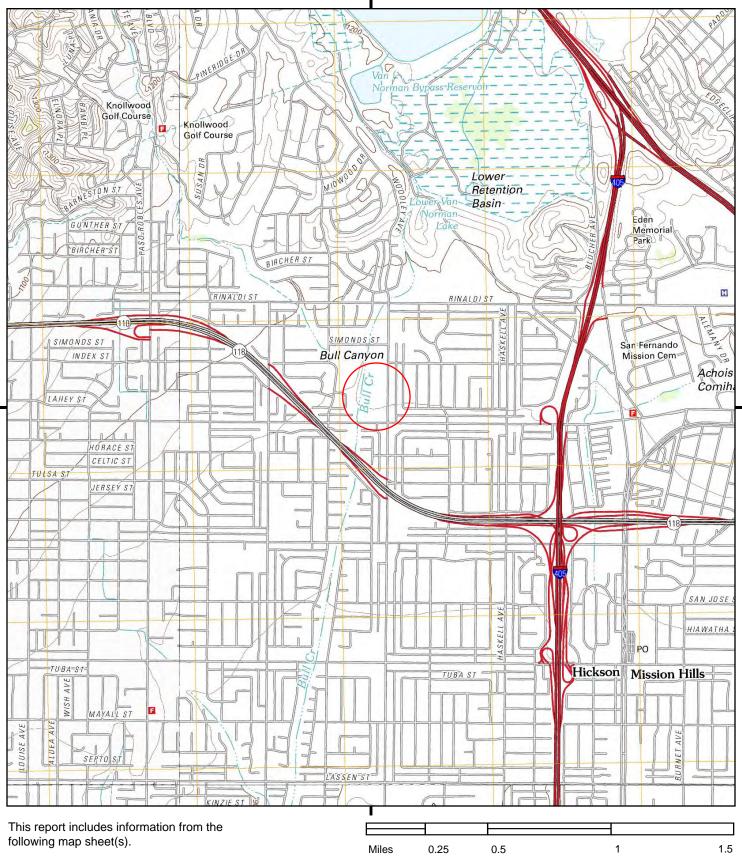
Fernando 1900 15-minute, 62500



Los Angeles 1900 15-minute, 62500



San Fernando 1900 15-minute, 62500



NW N NE

S

SE

W

SW

TP, San Fernando, 2012, 7.5-minute

SE, Van Nuys, 2012, 7.5-minute

SW, Canoga Park, 2012, 7.5-minute

NW, Oat Mountain, 2012, 7.5-minute

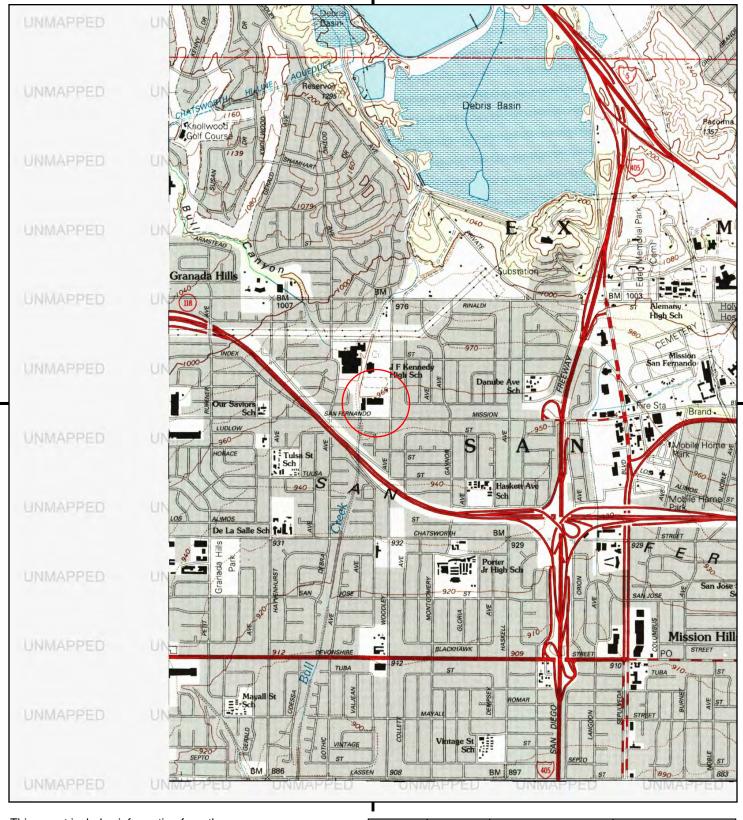
SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

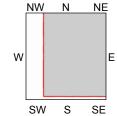
Granada Hills, CA 91344

CLIENT: California Environmental





This report includes information from the following map sheet(s).



TP, San Fernando, 1995, 7.5-minute



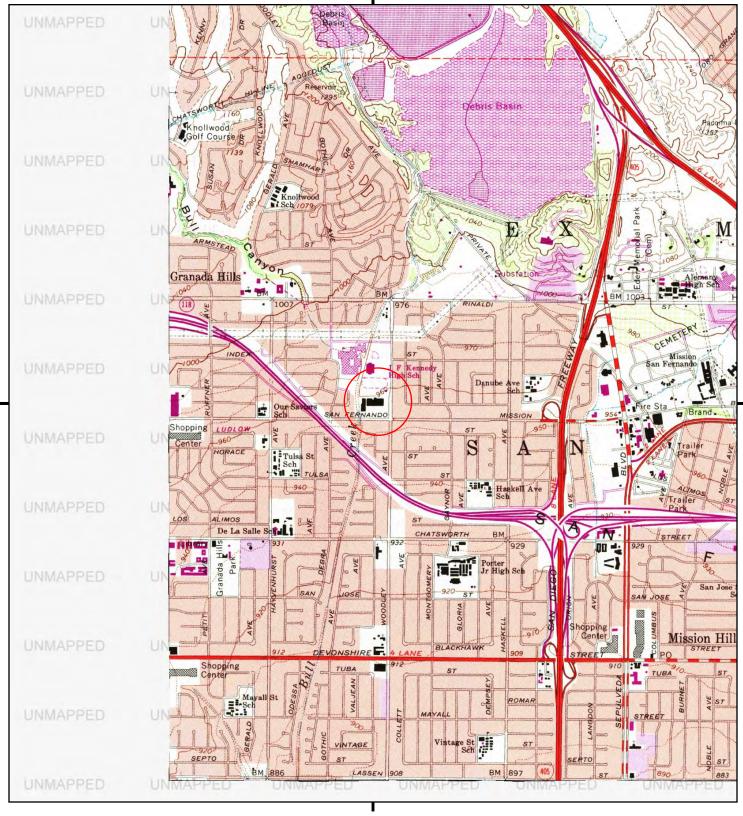
SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

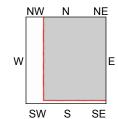
Granada Hills, CA 91344

CLIENT: California Environmental





This report includes information from the following map sheet(s).



TP, San Fernando, 1988, 7.5-minute

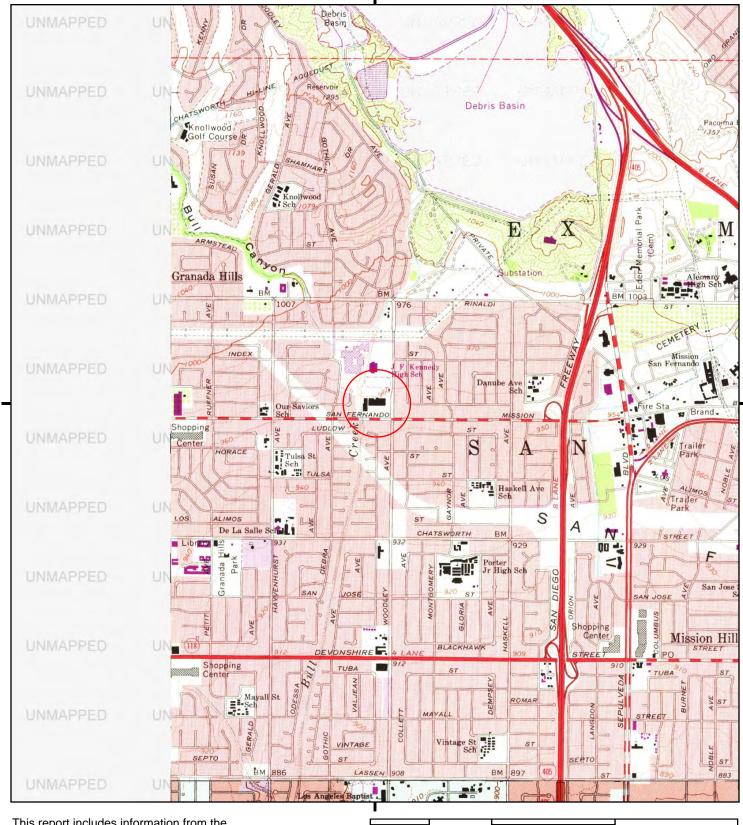


SITE NAME: 3436

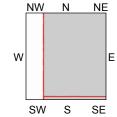
ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344





This report includes information from the following map sheet(s).



TP, San Fernando, 1972, 7.5-minute

SE, Van Nuys, 1972, 7.5-minute

SITE NAME: 3436

0.25

Miles

ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344

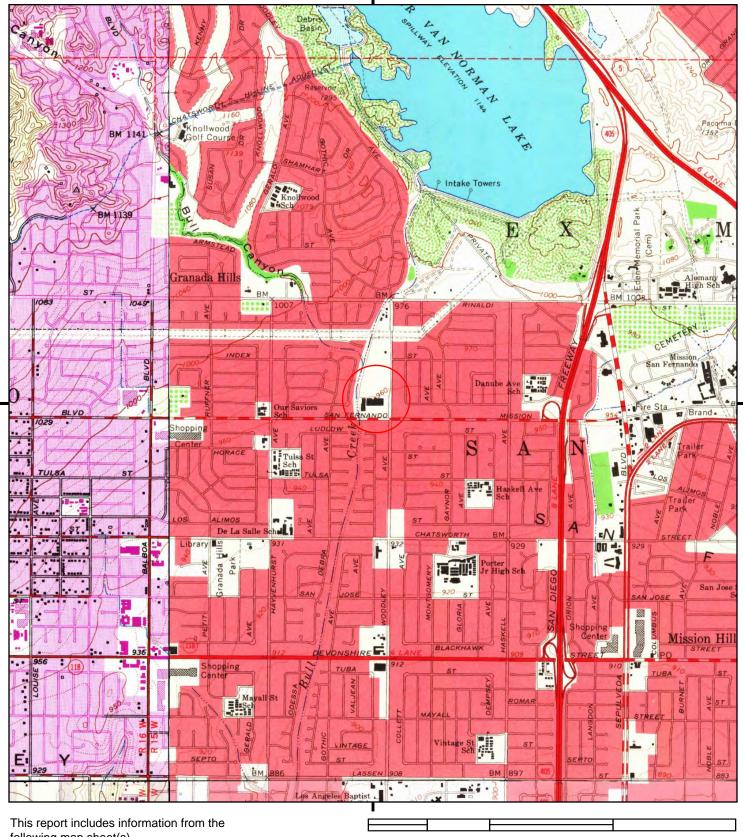
CLIENT: California Environmental

0.5

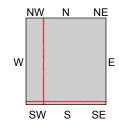


1.5

1



following map sheet(s).



TP, San Fernando, 1966, 7.5-minute

SE, Van Nuys, 1966, 7.5-minute

SW, Canoga Park, 1967, 7.5-minute

NW, Oat Mountain, 1969, 7.5-minute

SITE NAME: 3436

0.25

Miles

16225 San Fernando Mission Blvd ADDRESS:

Granada Hills, CA 91344

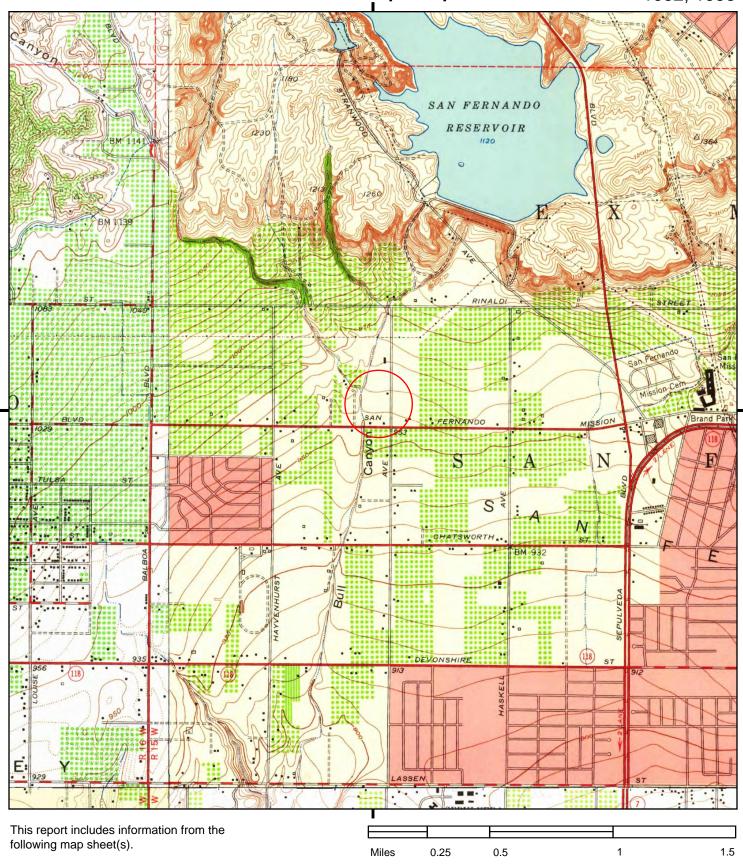
California Environmental CLIENT:

0.5



1

1.5



W N NE

TP, San Fernando, 1953, 7.5-minute

SE, Van Nuys, 1953, 7.5-minute

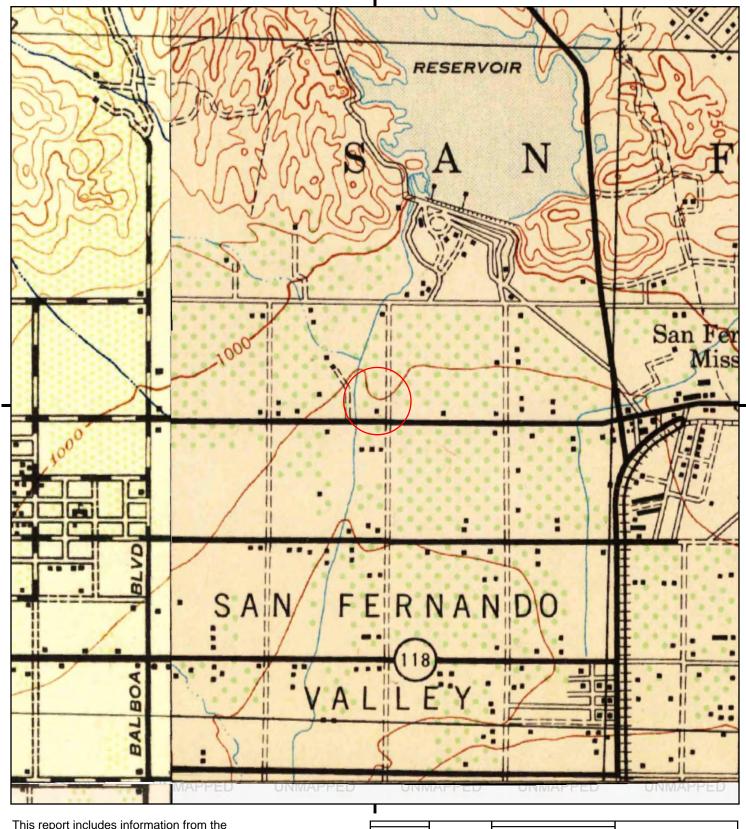
SW, Canoga Park, 1952, 7.5-minute

NW, Oat Mountain, 1952, 7.5-minute

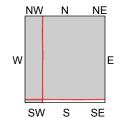
SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344



This report includes information from the following map sheet(s).



TP, San Fernando, 1945, 15-minute

SW, Calabasas, 1944, 15-minute

NW, Santa Susana, 1943, 15-minute

SITE NAME: 3436

0.25

Miles

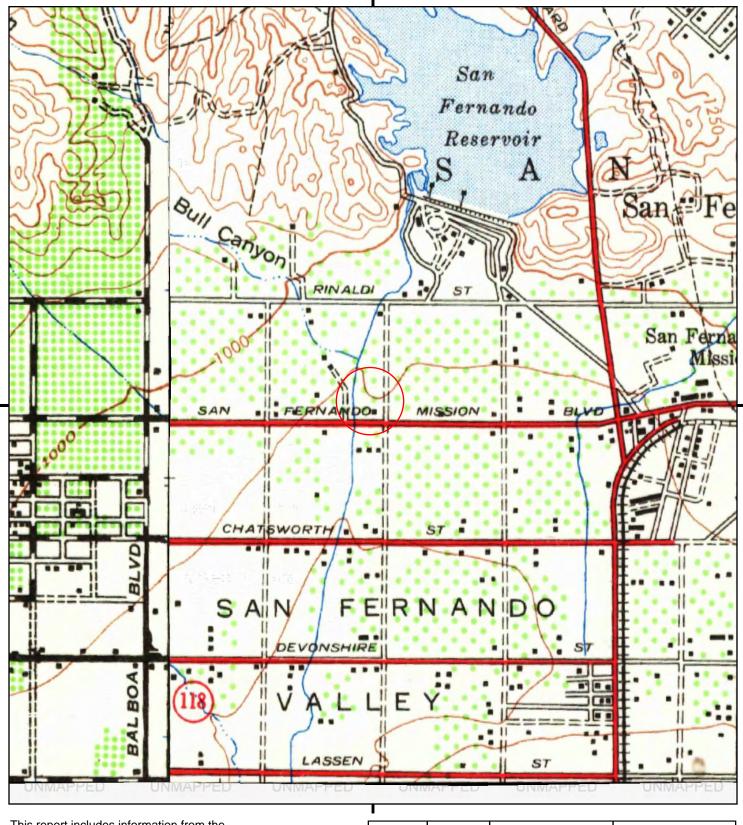
ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344

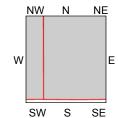
CLIENT: California Environmental

0.5

1.5



This report includes information from the following map sheet(s).



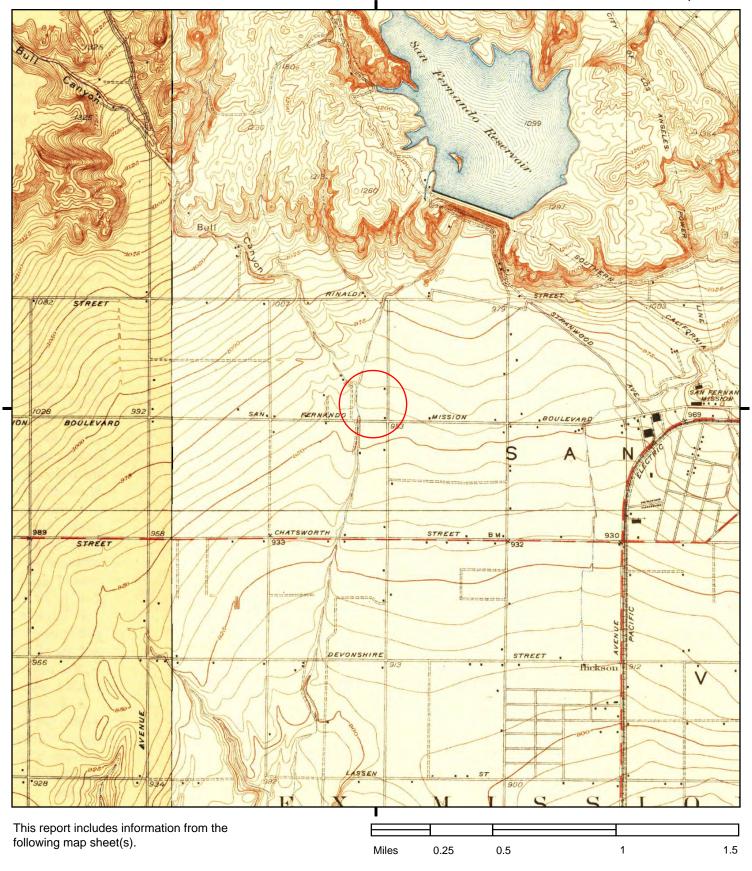
TP, San Fernando, 1940, 15-minute NW, Santa Susana, 1941, 15-minute

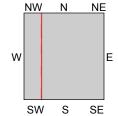


SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344



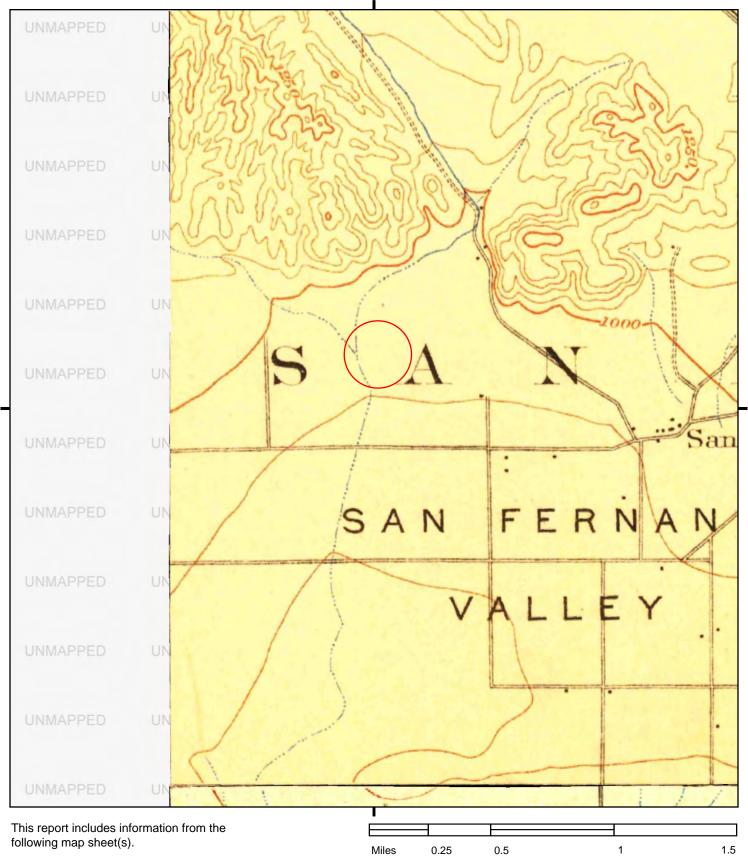


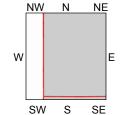
TP, Pacoima, 1927, 7.5-minute SW, Zelzah, 1928, 7.5-minute

ADDRESS: 16225 San Fernando Mission Blvd

SITE NAME: 3436

Granada Hills, CA 91344





TP, Fernando, 1900, 15-minute

SE, Los Angeles, 1900, 15-minute

TP, San Fernando, 1900, 15-minute

SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills, CA 91344



#### APPENDIX III

**Building Permits** 



There are two ways to request a copy of the document image.

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| ADMINISTRATIVE APPROVAL | MISCELLANEOUS      | 2/1/1983      |                 | HIST: M0025 003 0360 |
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| AFFIDAVIT               | OVERSIZED BUILDING | 6/16/1961     | OB 11948        | HIST: M0030 001 0475 |
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| BUILDING PERMIT         |                    | 10/23/1929    | 1929LA27526     | HIST: P1203 001 2066 |
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| BUILDING PERMIT         |                    | 3/25/1983     | 1983VN52623     | HIST: P0020 003 0288 |
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| BUILDING PERMIT |            | 1/11/1989     | 1989VN55216       | HIST: P0221 002 0322                      |
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| BUILDING PERMIT | ALTERATION | 7/10/1965     | 1965VN82232       | HIST: P1927 001 0526                      |
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| BUILDING PERMIT | BLDG-ALTER/REPAIR | 12/21/1961    | 1961LA03947       | HIST: P1584 002 0133                      |     |
| BUILDING PERMIT | BLDG-ALTER/REPAIR | 3/10/1962     | 1962VN04025       | HIST: P1892 001 2681                      |     |
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| BUILDING PERMIT | NEW CONSTRUCTION   | 11/16/1981         | 1981LA34449       | HIST: 00000 000 0000                         |     |
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| BUILDING PERMIT | SIGN               | 12/10/1971         | 1971VN77758       | HIST: P1968 004 0315                         |     |
| BUILDING PERMIT | SIGN               | 2/10/1972          | 1972VN79152       | HIST: P1969 002 0059                         |     |
| BUILDING PERMIT | SIGN               | 8/20/1973          | 1973VN01430       | HIST: 00000 000 0000 HIST: P1980 002 1416    |     |
| BUILDING PERMIT | SIGN               | 9/16/1982          | 1982LA50003       | HIST: 00000 000 0000 HIST: P0006 008 0159    |     |
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| BUILDING PERMIT | SIGN               | 11/5/1982          | 1982VN48085       | HIST: 00000 000 0000 HIST: P0011 001 0051    |     |
| BUILDING PERMIT | SIGN               | 1/28/1983          | 1983VN50685       | HIST: P0016 004 0165                         |     |
| BUILDING PERMIT | SIGN               | 9/21/1983          | 1983VN60732       |  |     |
| BUILDING PERMIT | SIGN               | 2/15/1984          | 1984VN66782       | HIST: P0048 003 0331                         |     |
| BUILDING PERMIT | SIGN               | 5/14/1991          | 1991SP06349       | HIST: P0325 006 0262                         |     |
| BUILDING PERMIT | SIGN               | 7/10/1996          | 1996VN03306       | HIST: P0579 003 0198                         |     |
| BUILDING PERMIT | SIGN               | 7/3/1997           | 1997VN20664       |  |     |
| BUILDING PERMIT | SIGN               | 7/3/1997           | 96048-20000-00286 | HIST: P630 7 268                             |     |
| BUILDING PERMIT | SIGN               | 8/6/2002           | 02048-10000-00905 | HIST: P778 7 362                             |     |
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| BUILDING PERMIT | SIGN               | 9/2/2005           | 05048-40000-00942 | IDIS: P2344 01732 0000 thru P2344 01732 0002 |     |
| BUILDING PERMIT | SIGN               | 8/28/2006          | 06048-20000-00967 | IDIS: P2344 01731 0000 thru P2344 01731 0002 | ( : |
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| CERTIFICATE OF OCCUPANCY |          | 1/25/1966     | 1965VN82232       | IDIS: O0726 02149 0000 HIST: O521<br>HIST: O232 1 3445                   | (:  |
| CERTIFICATE OF OCCUPANCY |          | 4/28/1967     | 1963VN27434       | IDIS: O0726 02147 0000 HIST: O521<br>HIST: O232 1 3440                   | (   |
| CERTIFICATE OF OCCUPANCY |          | 3/10/1972     | 1972VN77844       | IDIS: O0726 02159 0000 HIST: O521<br>HIST: O232 1 3462                   | ( . |
| CERTIFICATE OF OCCUPANCY |          | 12/2/1982     | 1982VN43551       | IDIS: O0749 01200 0000 HIST:<br>O0160 00040 0187 HIST: O0016 004<br>0187 |     |
| CERTIFICATE OF OCCUPANCY |          | 12/9/1982     | 1982VN43551       | IDIS: O0525 02554 0000 thru O0525 02554 0001 HIST: O0016 004 0186        | (:  |
| CERTIFICATE OF OCCUPANCY |          | 7/15/1983     | 1981LA34449       | IDIS: O0525 02553 0000 HIST: O0025 009 0384                              | (c) |
| CERTIFICATE OF OCCUPANCY |          | 9/11/1985     | 1983VN60888       | IDIS: O0549 04061 0000 HIST:<br>M0129 001 0101                           | ( . |
| CERTIFICATE OF OCCUPANCY |          | 4/6/1987      | 1986VN04933       | IDIS: O0570 04090 0000 HIST:<br>M0236 002 0436                           | (:  |
| CERTIFICATE OF OCCUPANCY |          | 4/16/1987     | 1986VN13956       | IDIS: O0570 03584 0000 HIST:<br>M0241 001 0387                           | 1   |
| CERTIFICATE OF OCCUPANCY |          | 4/16/1987     | 1986VN14302       | IDIS: O0570 03583 0000 HIST:<br>M0241 001 0386                           | 1   |
| CERTIFICATE OF OCCUPANCY |          | 6/5/1987      | 1986VN13330       | IDIS: O0570 00569 0000 HIST:<br>M0245 004 0504                           | 1   |
| CERTIFICATE OF OCCUPANCY |          | 8/18/1987     | 1987VN23879       | IDIS: O0572 01391 0000 HIST:<br>M0251 006 0127                           | ( - |
| CERTIFICATE OF OCCUPANCY |          | 9/7/2005      | 04010-10000-05522 | IDIS: O1013 00513 0000 thru O1013 00513 0001                             | (:  |
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| CERTIFICATE OF OCCUPANCY |          | 9/7/2005      | 05016-10000-05940 | IDIS: O1013 00513 0000 thru O1013 00513 0001                             | 1   |
| CERTIFICATE OF OCCUPANCY |          | 9/7/2005      | CERT 12781        | IDIS: O1013 00513 0000 thru O1013 00513 0001                             | (:  |
| CERTIFICATE OF OCCUPANCY |          | 11/18/2005    | 05016-10000-09361 | IDIS: O1013 00517 0000 thru O1013 00517 0001                             | (c) |
| CERTIFICATE OF OCCUPANCY |          | 11/18/2005    | 05016-10001-09361 | IDIS: O1013 00517 0000 thru O1013 00517 0001                             | (c) |

| Document Type            | Sub Type                 | Document Date | Document Number   | Reel Batch Frame                             | $\Box$ |
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| CERTIFICATE OF OCCUPANCY |                          | 11/18/2005    | CERT 13489        | IDIS: O1013 00517 0000 thru O1013 00517 0001 | 1      |
| CERTIFICATE OF OCCUPANCY |                          | 12/10/2012    | 10016-20000-12147 |  | 1.     |
| CERTIFICATE OF OCCUPANCY |                          | 12/10/2012    | CERT 87807        |  | 1.     |
| COMMISSION               | BAAB BOARD FILE          | 12/31/1982    | BF 824951         | HIST: B0076 006 0312                         |        |
| COMMISSION               | BAAB BOARD FILE          | 12/31/1982    | BF 824952         | HIST: B0076 006 0314                         |        |
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| ELECTRICAL PERMIT        |                          | 9/24/1986     | 0986S9628         | HIST: T0071 001 0441                         |        |
| ELECTRICAL PERMIT        |                          | 12/22/1986    | 1286R1379         | HIST: T0081 001 0378                         | $\Box$ |
| ELECTRICAL PERMIT        |                          | 1/29/1987     | 0187R6167         | HIST: T0083 005 0445                         |        |
| ELECTRICAL PERMIT        |                          | 2/9/1987      | 0287N8396         | HIST: T0084 006 0134                         |        |
| ELECTRICAL PERMIT        |                          | 2/12/1987     | 0287N8734         | HIST: T0086 004 0103                         |        |
| ELECTRICAL PERMIT        |                          | 2/18/1987     | 0287R8850         | HIST: T0086 001 0064                         | $\top$ |
| ELECTRICAL PERMIT        |                          | 3/2/1987      | 0387S388          | HIST: T0087 006 0352                         |        |
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| ELECTRICAL PERMIT        |                          | 8/9/2012      | 12041-90000-18717 |  | ( .    |
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| GRADING                  | GRADING<br>CERTIFICATE   | 10/21/1993    | 1986VN06140       | HIST: M0861 002 0433                         |        |
| GRADING                  | GRADING<br>CERTIFICATE   | 10/21/1993    | 1986VN06140       | HIST: M0861 002 0433                         |        |
| GRADING                  | GRADING<br>CERTIFICATE   | 10/21/1993    | 1986VN06140       | HIST: M0861 002 0433                         |        |
| GRADING                  | GRADING<br>CERTIFICATE   | 10/21/1993    | 1986VN06140       | HIST: M0861 002 0433                         |        |
| GRADING                  | GRADING PRE-INSP<br>REPT | 12/5/2003     |                   |  | V.     |
| GRADING                  | GRADING PRE-INSP<br>REPT | 5/26/2004     |                   |  | V.     |
| GRADING                  | GRADING PRE-INSP<br>REPT | 12/7/2004     |                   |  | V.     |
| GRADING                  | SOILS & GEOLOGY<br>FILE  | 3/17/2005     |                   |  | Ų.     |

| Document Type         | Sub Type        | Document Date | Document Number   | Reel Batch Frame     |     |
|-----------------------|-----------------|---------------|-------------------|----------------------|-----|
| MECHANICAL PERMIT     | FIRE SPRINKLER  | 5/15/2007     | 07043-90000-01483 |                      | ( · |
| MECHANICAL PERMIT     | HVAC            | 9/23/1986     | 0986M5909         | HIST: T0070 007 0379 |     |
| MECHANICAL PERMIT     | HVAC            | 9/23/1986     | 0986M5909         | HIST: T0070 007 0379 |     |
| MECHANICAL PERMIT     | HVAC            | 9/23/1986     | 0986M5909         | HIST: T0070 007 0379 |     |
| MECHANICAL PERMIT     | HVAC            | 9/23/1986     | 0986M5909         | HIST: T0070 007 0379 |     |
| MECHANICAL PERMIT     | HVAC            | 10/1/1986     | 1086Q793          | HIST: T0071 007 0222 |     |
| MECHANICAL PERMIT     | HVAC            | 10/3/2005     | 05044-90000-10252 |                      | ( · |
| MECHANICAL PERMIT     | PLUMBING        | 5/2/1985      | 0585M7673         | HIST: T0014 007 0301 |     |
| MECHANICAL PERMIT     | PLUMBING        | 6/17/1986     | 0686R7307         | HIST: T0059 005 0493 |     |
| MECHANICAL PERMIT     | PLUMBING        | 1/27/1987     | 0187R5794         | HIST: T0083 005 0205 |     |
| MECHANICAL PERMIT     | PLUMBING        | 2/9/1987      | 0287N8397         | HIST: T0084 006 0111 |     |
| MECHANICAL PERMIT     | PLUMBING        | 3/31/1987     | 0387S5002         | HIST: T0090 007 0375 |     |
| MECHANICAL PERMIT     | PLUMBING        | 4/1/1987      | 0487P3817         | HIST: T0090 007 0355 |     |
| MECHANICAL PERMIT     | PLUMBING        | 5/15/1987     | 0587P8594         | HIST: T0096 002 0400 |     |
| MECHANICAL PERMIT     | PLUMBING        | 6/23/1987     | 0687L3107         | HIST: T0101 001 0237 |     |
| MECHANICAL PERMIT     | PLUMBING        | 8/3/1987      | 0887F90           | HIST: T0106 001 0150 |     |
| MECHANICAL PERMIT     | PLUMBING        | 8/5/1987      | 0887R3246         | HIST: T0105 007 0048 |     |
| MECHANICAL PERMIT     | PLUMBING        | 7/28/1989     | 0789N5056         | HIST: T0182 003 0429 |     |
| MECHANICAL PERMIT     | PLUMBING        | 7/4/2005      | 05042-90000-16624 |                      | La  |
| MECHANICAL PERMIT     | PLUMBING        | 7/28/2005     | 05042-90000-18854 |                      | (c  |
| MECHANICAL PERMIT     | PLUMBING        | 8/1/2005      | 05042-90000-19155 |                      | La  |
| MECHANICAL PERMIT     | PLUMBING        | 9/7/2014      | 14042-90000-17361 |                      | La  |
| MECHANICAL PERMIT     | PRESSURE VESSEL | 9/7/2014      | 14045-90000-00196 |                      | (c  |
| PERMIT ADDRESS CHANGE | BUILDING        | 6/21/1961     | 1961LA91294       | HIST: P1584 002 0143 |     |
| PERMIT ADDRESS CHANGE | BUILDING        | 6/21/1961     | 1961LA98867       | HIST: P1584 002 0143 |     |
| PERMIT ADDRESS CHANGE | BUILDING        | 6/21/1961     | 1961VN92188       | HIST: P1584 002 0143 |     |
| PERMIT ADDRESS CHANGE | BUILDING        | 9/21/1982     | 1982LA60003       | HIST: P0007 011 0028 |     |
| PERMIT ADDRESS CHANGE | BUILDING        | 9/21/1982     | 1982LA60003       | HIST: P0008 008 0007 |     |
| PERMIT ADDRESS CHANGE | BUILDING        | 6/12/1991     | 1991SP06349       | HIST: P0330 005 0283 |     |
| PLAN MAINTENANCE      |                 | 6/3/1986      | 1986VN04933       | HIST: H0556 001 0122 |     |
| PLAN MAINTENANCE      |                 | 11/20/1986    | 1986VN13330       | HIST: H0757 001 0359 |     |
| PLAN MAINTENANCE      |                 | 12/4/1986     | 1986VN13956       | HIST: H0771 001 0055 |     |
| PLAN MAINTENANCE      |                 | 12/11/1986    | 1986VN14302       | HIST: H0778 001 0136 |     |
| PLAN MAINTENANCE      |                 | 6/23/1987     | 1987VN23879       | HIST: H1019 001 0388 |     |
| PLAN MAINTENANCE      |                 | 1/11/1989     | 1989VN55216       | HIST: H1820 001 0444 |     |

Document Search : Summary Report Page 8

| Document Type    | Sub Type      | Document Date | Document Number   | Reel Batch Frame                           |     |
|------------------|---------------|---------------|-------------------|--|-----|
| PLAN MAINTENANCE |               | 4/18/1991     | 1991LA73531       | HIST: J0524 001 0380                       |     |
| PLAN MAINTENANCE |               | 5/14/1991     | 1991SP06349       | HIST: J0548 002 0379                       |     |
| PLAN MAINTENANCE |               | 7/16/1991     | 1991VN98406       | HIST: J0555 001 0424                       |     |
| PLAN MAINTENANCE |               | 7/12/1994     | 1994HO29979       | HIST: J0751 002 0095                       |     |
| PLAN MAINTENANCE |               | 3/13/1997     | 1997LA61698       | HIST: J0979 001 0295                       |     |
| PLAN MAINTENANCE |               | 7/10/2000     | 00016-10000-08464 | HIST: J1368 1 382                          |     |
| PLAN MAINTENANCE |               | 10/6/2003     | 03016-20000-15553 | HIST: J1975 1 292                          | 100 |
| RANGE FILE       | MISCELLANEOUS | 11/7/1968     |                   | HIST: R0174 002 0277                       |     |
| RANGE FILE       | MISCELLANEOUS | 2/9/1989      |                   | HIST: M0377 010 0160                       |     |
| RANGE FILE       | MISCELLANEOUS | 8/9/1989      |                   | HIST: M0431 002 0402                       |     |
| RANGE FILE       | MISCELLANEOUS | 8/31/1989     |                   | HIST: M0433 003 0492                       |     |
| RANGE FILE       | MISCELLANEOUS | 2/28/1991     |                   | HIST: M0577 007 0159                       |     |
| RANGE FILE       | MISCELLANEOUS | 3/12/1991     |                   | HIST: M0584 007 0157                       |     |
| RANGE FILE       | MISCELLANEOUS | 10/17/2003    |                   | IDIS: R593 00151 0000 thru R593 00151 0003 |     |
| RANGE FILE       | MISCELLANEOUS | 11/19/2003    |                   | IDIS: R593 00152 0000 thru R593 00152 0003 |     |



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- 1) By fax using the request form. Click on the following link http://ladbs.org/LADBSWeb/LADBS\_Forms/Administrative/AD-Form.01.pdf to download the request form.
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- 3) If you have any questions, please visit one of our Records Counters.

#### **RECORDS COUNTER HOURS**

MONDAY, TUESDAY, THURSDAY, FRIDAY: 7:30 AM to 4:30 PM WEDNESDAY: 9:00 AM to 4:30 PM

| Metro                | Van Nuys           |
|----------------------|--------------------|
| 201, N. Figueroa St. | 6262 Van Nuys Blvd |
| 1st Floor, Room 110  | Record Counter     |
| Record Counter       | Van Nuys,CA 91401  |
| Los Angeles,CA 90012 |                    |

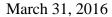
Assessor Number: BOOK NUMBER: 2681 PAGE NUMBER: 011 PARCEL NUMBER: 039

| Document Type           | Sub Type           | Document Date     | Document Number   | Reel Batch Frame     |    |
|-------------------------|--------------------|-------------------|-------------------|----------------------|----|
| ADMINISTRATIVE APPROVAL | MISCELLANEOUS      | 8/30/1988         |                   | HIST: B0152 008 0249 |    |
| ADMINISTRATIVE APPROVAL | MISCELLANEOUS      | 8/30/1988         |                   | HIST: B0152 008 0249 |    |
| BUILDING PERMIT         | ALTERATION         | 12/31/1986        | 1986VN15352       | HIST: P0137 006 0391 |    |
| BUILDING PERMIT         | ALTERATION         | 8/18/1988         | 1988VN47029       | HIST: P0203 002 0335 |    |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 10/30/1959        | 1959LA45981       | HIST: P1584 002 0091 |    |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 11/14/1960        | 1960LA74707       | HIST: P1584 002 0098 |    |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 12/7/1960         | 1960LA76368       | HIST: P1584 002 0100 |    |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 7/17/2013         | 13016-10000-08145 |                      | 1  |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 4/7/2014          | 14016-20000-04427 |                      | 1  |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 6/4/2014          | 14016-20000-05413 |                      | 1  |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 7/25/2014         | 14016-20000-12728 |                      | Ve |
| BUILDING PERMIT         | BLDG-ALTER/REPAIR  | 8/27/2014         | 14016-20000-17201 |                      | 1  |
| BUILDING PERMIT         | BLDG-NEW           | 8/26/1958         | 1958LA11242       | HIST: P1584 002 0094 |    |
| BUILDING PERMIT         | GRADING            | 11/13/1959        | 1959LA47099       | HIST: P1584 002 0102 |    |
| BUILDING PERMIT         | GRADING            | 7/25/2014         | 14030-20000-03939 |                      | 1  |
| BUILDING PERMIT         | NEW CONSTRUCTION   | 11/17/1989        | 1989WL86116       | HIST: P0264 001 0098 |    |
| BUILDING PERMIT         | NONBLDG-ALTER/REPA | <b>R</b> /17/2013 | 13026-10000-00207 |                      | V  |

| Document Type            | Sub Type                             | Document Date | Document Number   | Reel Batch Frame                                       | $\Box$ |
|--------------------------|--------------------------------------|---------------|-------------------|--|--------|
| BUILDING PERMIT          | NONBLDG-NEW                          | 9/2/2014      | 14020-20000-02034 |  | 1      |
| BUILDING PERMIT          | SIGN                                 | 4/23/1986     | 1986LA35319       | HIST: P0113 006 0231                                   | $\Box$ |
| BUILDING PERMIT          | SIGN                                 | 2/23/1998     | 98048-20000-00352 | HIST: P651 5 376                                       |        |
| BUILDING PERMIT          | SIGN                                 | 9/11/1998     | 98048-10000-01603 |  | 1      |
| BUILDING PERMIT          | SIGN                                 | 7/15/1999     | 99048-20000-01233 | HIST: P691 9 248                                       |        |
| BUILDING PERMIT          | SIGN                                 | 10/2/2014     | 14048-20000-02052 |  | 1      |
| CERTIFICATE OF OCCUPANCY |                                      | 7/18/1961     | 1959LA45981       | IDIS: O0726 02145 0000 HIST: O521<br>HIST: O232 1 3435 | (s     |
| CERTIFICATE OF OCCUPANCY |                                      | 9/30/2014     | 14016-20000-05413 |  | ( :    |
| CERTIFICATE OF OCCUPANCY |                                      | 9/30/2014     | CERT 124617       |  | ( :    |
| ELECTRICAL PERMIT        |                                      | 12/31/1986    | 1286N5571         | HIST: T0081 001 0325                                   | П      |
| ELECTRICAL PERMIT        |                                      | 8/23/1988     | 0888Q520          | HIST: T0147 001 0256                                   | $\Box$ |
| ELECTRICAL PERMIT        |                                      | 3/14/2006     | 06041-90000-06414 |  | 1      |
| GRADING                  | COMPACTION FILE                      | 10/21/1960    |                   | HIST: G0035 002 0009                                   | П      |
| GRADING                  | COMPACTION FILE                      | 11/9/1960     |                   | HIST: G0035 002 0006                                   | П      |
| GRADING                  | COMPACTION FILE                      | 11/9/1960     |                   | HIST: G0035 002 0034                                   | $\Box$ |
| GRADING                  | COMPACTION FILE                      | 9/2/2014      |                   |  | 10     |
| GRADING                  | DEPARTMENT LETTER                    | 6/5/1958      |                   | HIST: G0035 002 0014                                   | $\Box$ |
| GRADING                  | FOUNDATION<br>INVESTIGATION<br>REPOR | 5/19/1958     |                   | HIST: G0035 002 0015                                   |        |
| GRADING                  | FOUNDATION<br>INVESTIGATION<br>REPOR | 6/27/1960     |                   | HIST: G0035 002 0001                                   |        |
| GRADING                  | GRADING<br>CERTIFICATE               | 11/25/2014    | 14030-20000-03939 |  | ( ·    |
| MECHANICAL PERMIT        | PLUMBING                             | 12/31/1986    | 1286N5570         | HIST: T0081 001 0296                                   | $\Box$ |
| MECHANICAL PERMIT        | PLUMBING                             | 6/3/2014      | 14042-90000-10287 |  | 1      |
| OVERSIZED DOCUMENT       | GRADING                              | 12/31/1956    |                   | HIST: G0029 006 0018                                   | $\Box$ |
| PLAN MAINTENANCE         |                                      | 4/22/1986     | 1986LA35319       | HIST: H0511 001 0437                                   | $\Box$ |
| PLAN MAINTENANCE         |                                      | 12/31/1986    | 1986VN15352       | HIST: H0797 001 0456                                   |        |
| PLAN MAINTENANCE         |                                      | 8/18/1988     | 1988VN47029       | HIST: H1656 001 0452                                   |        |
| PLAN MAINTENANCE         |                                      | 11/17/1989    | 1989WL86116       | HIST: J0151 001 0311                                   |        |
| RANGE FILE               | MISCELLANEOUS                        | 7/11/1980     |                   | HIST: R0124 009 0143                                   | $\Box$ |

#### APPENDIX IV

**Agency Inquiry and Response Letters** 





CE Job No.EV0216-3436 Fax No. (818) 717-6526

Department of Toxic Substances Control 9211 Oakdale Avenue Chatsworth, California 91311-6505

Attention: Joan/Vivian

Re: File Review Request

16201 - 16287 San Fernando Mission Blvd, Granada Hills, CA 91344 (All odd numbers) 11135 – 11155 Woodley Avenue, Granada Hills, CA 91344 (All odd numbers)

California Environmental is requesting to review any files you may have for the above referenced property under the Public Records Act. The case number of the site is unknown. We would like to review this file as soon as possible. If no file is found, please provide a written statement to ryan.bzoskie@calenviro.com or via fax 818-991-1544.

Your timeliness in this important matter is appreciated.

Should you have any questions, please contact me at (818) 991-1542.

Respectfully,

Ryan T. Bzoskie Project Manager





Matthew Rodriquez
Secretary for
Environmental Protection

#### Department of Toxic Substances Control



Governor

Barbara A. Lee, Director 9211 Oakdale Avenue Chatsworth, California 91311

February 12, 2016

Ryan T. Bzoskie Project Manager California Environmental 30423 Canwood Street, Suite 208 Agoura Hills, CA 91301

16225 San Fernando Mission Blvd, Granada Hills, CA 91344

PR3-021116-01

Dear Mr. Bzoskie:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control.

After a thorough review of our files we have found that no such records exist at this office pertaining to the site/facility referenced above.

We would also like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. Envirostor can be accessed at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view Envirostor.

If you have any questions or would like further information regarding your request, please contact me at (818) 717-6522.

Sinderely,

Glenn Castillo/rh

Regional Records Coordinator

# LOS ANGELES FIRE DEPARTMENT UNDERGROUND TANKS REQUEST FOR FIRE PREVENTION RECORDS ADDRESS: 200 NORTH MAIN ST., 17<sup>TH</sup> FLR.RM.1700

NEW OFFICE# - 213-978-3700 NEW EMAIL lafd.usttestnotify@lacity.org

# PLEASE GIVE US 7 TO 10 BUSINESS DAYS TO HONOR YOUR REQUEST.

# ONE ADDRESS ONLY - PER SHEET COMPLETE THIS BOX. ONE FOR EACH PROPERTY CONCERNED

| PHONE NO: (818) 991-1542               | FAX #/EMAIL: (818) 991 - 1544                              |
|--|--|
| NAME OF REQUESTER (PLEASE PRINT): 6REC | SORY RVENSUESO greg@ calenum com                           |
| REPRESENTING (COMPANY NAME): _ CALIFO  | RNIA ENLIRONMENTAL   |
| SIGNATURE: Jegun Tien man              | DATE: 3 1 31 1 16  |
| DRIVER LIC NO:                         | EXP:   |
| ADDRESS FOR WHICH RECORDS ARE REQUESTI | ED: 16201 - 16287 SAN FERNANDO MISSION FUD                 |
| AND 11135-11155 WOOLEY AVE.            | GRANADA HILLS, CA 91344                                    |
| REASON FOR REQUEST: PH. I INJE         | STIGATION  |
|  |  |
| NO COPY SERVICES ALLOW!                | BILLING & ACCOUNTS RECEIVABLE                              |
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| FOR OFFICE USE ONLY:                   |  |
| REVIEW ONLY (NO COPIES)                |  |
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#### PUBLIC HEALTH INVESTIGATION CUSTODIAN OF RECORDS REQUEST FOR PUBLIC RECORDS

TEL (323) 890-7806

FAX (323) 728-0217

Complete the Custodian of Records Request for Public Records Form in blue or black ink, or type. If you have any questions about completing the form or requesting Hazardous Materials reports call (323) 890-7806.

Submit your request to Public Health Investigation, Custodian of Records Office to Fax Number (323) 728-0217, Email to phicor@ph.lacounty.gov, or mail to:

> Public Health Investigation 5555 Ferguson Drive Suite 120-04 Commerce, CA 90022

| Required Information   |         |                                    |       |                             |        |                         |   |  |  |
|--|---------|------------------------------------|-------|-----------------------------|--------|-------------------------|---|--|--|
| REQUESTOR INFORMATION  | ON      |                                    |       |                             |        |                         |   |  |  |
| Name *   |         | GREGORY BUC                        | NS    | VUESO                       |        |                         |   |  |  |
| Address *  |         | 30423 CANWOOD ST, SVITE 208        |       |                             |        |                         |   |  |  |
| City *   |         | AGOURA HILL                        | 5     |                             |        |                         |   |  |  |
| State *  | 1       | CALIFORNIA                         |       |                             |        |                         |   |  |  |
| Zip *  |         | 91301                              |       |                             |        |                         |   |  |  |
| Telephone No. *  |         | (818)991-15                        | 4-2   |                             |        |                         |   |  |  |
| Fax No.  | +       | 1818/991-15                        | 14    |                             |        |                         |   |  |  |
| Website/Email  | _       | (010) (11-13                       | 11    |                             | _      |                         |   |  |  |
| CONTACT PERSON INFOR   | MAT     | ION (II different from Rea         |       | nel .                       |        |                         | _ |  |  |
|  | 17125   | i TOR (1) ugjerem jram Keq         | nesic | //)                         | _      |                         |   |  |  |
| Name   | -       |                                    |       |                             |        |                         |   |  |  |
| Telephone No.  |         |                                    |       |                             |        |                         |   |  |  |
| DELIVERY OF RECORDS (  | If diff | ferent from Requestor)             |       |                             |        |                         |   |  |  |
| Address  | T       |                                    |       |                             |        |                         |   |  |  |
| City   |         |                                    |       |                             |        |                         |   |  |  |
| Zip  | $\top$  |                                    |       |                             |        |                         |   |  |  |
| RECORD INFORMATION T   | 'vne (  | of Record * (Chaose only o         | ie ne | er request)                 | -      |                         |   |  |  |
| ENVIRONMENTAL HEAL<br>DISTRICT SURVEILLAN  | тн      | ENVIRONMENTAL<br>HEALTH PROTECTION |       | HEALTH HAZARDO<br>MATERIALS | us     | ALL OTHERS              |   |  |  |
| Apartment, Condo, Home   |         | The de la constant                 | 1     | WATERWIED                   |        | ALL OTHERS              | _ |  |  |
| Inspections  |         | Beaches                            |       | CalARP                      | 0      | Animal Bite Report      |   |  |  |
|  |         | Detiches                           | -     | Canala                      |        | этти вне кероп          | + |  |  |
| Apartment, Condo, Home and<br>Institution Lead Inspections   | 1 1     | Landilla                           | 1     | Parameter Danish            | 0      | A Code of A Code on the |   |  |  |
|  | -       | Landfills                          | -     | Emergency Response          | 1.7    | Medical Marijuana ID    | - |  |  |
| Food Borne Outbreak  | -       | Public Swimming Pools              | -     | Hazmat Site Inspections     | 4      |                         | + |  |  |
| Food Poisoning   | -       | Recycled Water                     | -     | Hazmat Site Mitigation      | 0      |                         | + |  |  |
| Food Vehicles  | -       | Residential Pools                  | -     |                             | -      |                         | + |  |  |
| Motels and Hotel Inspection  |         | Septic Tanks                       | -     |                             | 1      |                         | 1 |  |  |
| Retail Food Inspection   |         | Sewage                             |       |                             |        |                         | 1 |  |  |
| Schools and Day Care   |         | 100                                |       |                             |        |                         |   |  |  |
| Inspection   |         | Water Wells                        | _     |                             |        |                         | _ |  |  |
| Street Vendor  | 100     |                                    |       |                             |        |                         |   |  |  |
| Other Type of Record:  | V       | UST, Hazardous Wa                  | ste   | Generator Hazardou          | s Ma   | terials                 |   |  |  |
| - Annual Control of the Control of t | 10      | OD IT Hazardous Wa                 | No.   | Generator, Trazardou        | 3 1416 | - Contain               |   |  |  |
| REQUEST INFORMATION  | Provi   | ide as much information po         | ssibl | (e)                         |        |                         |   |  |  |
| Sycident Date/Time   | 7       |                                    |       |                             |        |                         |   |  |  |
| Children Philips   |         | 11 00 1 11 05                      | 7     | CALL COLLA                  | -14    |                         |   |  |  |
| nciden/Food Borne  |         | 16201-1620                         | 7     | JAN PERIVAN                 | DO     | MISSION BWD.<br>91344   |   |  |  |
| Ilness/Ordbreak Summary No.  |         | GRAN                               | Spa   | DA HULLS C                  | 14     | 91344                   |   |  |  |
| Type of Disease  | -       | 40.11                              |       |                             | -      |                         |   |  |  |
| Inspector Name (If known)  | +       |                                    | -     |                             | _      |                         |   |  |  |
|  | -       | 11122 1111                         |       |                             |        |                         | _ |  |  |
| ncident Location   | -       | 11155 - 111                        | 2     | ADA HILLS                   | he     | NVC.                    | _ |  |  |
| Owner Name   | -       | 6RA                                | 10    | ADA HILLS,                  | CA     | 91344                   |   |  |  |
| Victim/Patient/Complainant   |         |                                    |       |                             |        |                         |   |  |  |
| Dage of Birth  |         | / h                                |       | 14.4                        | 144    | 1                       | _ |  |  |
| Medical Record No.   |         | (ALL                               |       | ODD NUMB                    | E 1    | 25                      | _ |  |  |
| ocation of Records   | 1       |                                    |       |                             |        | 1                       | _ |  |  |
| Site/Street Address  |         |                                    | _     |                             |        |                         | _ |  |  |
| Site/City  | +       |                                    |       |                             | _      |                         | _ |  |  |
| Site/Zip   | +       |                                    | -     |                             | _      |                         | _ |  |  |
| merzip   | 1       |                                    | -     |                             |        |                         | _ |  |  |
|  |         |                                    |       |                             |        |                         |   |  |  |

# California



Via Email Only: <u>RB4-PublicRecords@waterboards.ca.gov</u> CE Job No.EV0216-3436

Los Angeles Regional Water Quality Control Board
Attention: Laura Gallardo
320 W. 4th St. Suite 200,
Los Angeles, CA 90013
UST File Review, Site Clean-up Program File Review, SLIC 2 Unit File Review

Re: File Review for

16201 - 16287 San Fernando Mission Blvd, Granada Hills, CA 91344 (All odd numbers) 11135 — 11155 Woodley Avenue, Granada Hills, CA 91344 (All odd numbers)

I am requesting to review any UST, Site Clean-up Program (former SLIC) Unit, and SLIC 2 (former WIP) files you may have for the above referenced site. At your earliest convenience, please contact the undersigned and advise when an appointment to review the files is possible. If no file is found, please provide a written statement to ryan.bzoskie@calenviro.com or via fax 818-991-1544.

Thank you for your assistance,

Ryan T. Bzoskie Project Manager From: "WB-RB4-PublicRecords" <RB4-PublicRecords@waterboards.ca.gov>

Subject: RE: 16225 San Fernando Mission Blvd, Granada Hills, CA 91344/Tracking No

2016021023

Sent date: 02/22/2016 02:53:58 PM

To: "Ryan T. Bzoskie"<ryan.bzoskie@calenviro.com>
Co: "Gallardo, Laura@Waterboards" <Laura.Gallardo@waterboards.ca.gov>

The Regional Board has reviewed its files and has concluded that it does not have any records that are responsive to your request.

----Original Message----

From: Ryan T. Bzoskie [mailto:ryan.bzoskie@calenviro.com]

Sent: Wednesday, February 10, 2016 1:53 PM

To: WB-RB4-PublicRecords

Subject: 16225 San Fernando Mission Blvd, Granada Hills, CA 91344

Please see the attached file review request, thank you

Ryan Bzoskie,

California Environmental - Engineering Contractor A 732377 - Haz 30423 Canwood Street - Suite 208 Agoura Hills, California 91301 o -818-991-1542 f-818-991-1544 c -818-703-2471

www.calenviro.com



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 118259

Company Name AB CELLULAR HOLDING LLC, #142

Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

No Equipment Listed



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 118259

Company Name AB CELLULAR HOLDING LLC, #142
Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 103336

Company Name L.A. CELLULAR TELEPHONE CO., (SITE #142)

Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

Yes. Please contact your AQMD Customer Service Rep. at (909) 396-2900, or call toll-free (866) 888-8838.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 298300

Facility Information

Business Name L.A. CELLULAR TELEPHONE CO., (SITE #142)

Facility ID 103336 Facility Status ACTIVE

Application Information

Application Type Registration Application Application Application Received 11/10/1994

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 2/21/1995

Equipment Desc I C E (50-500 HP) EM ELEC GEN-DIESEL

Permit Number D88600 Permit Status EXPIRED

View Permit Image

Engineer Information

Engineer Assigned

Engineer Phone Team Assigned N2



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 103336

Company Name L.A. CELLULAR TELEPHONE CO., (SITE #142)

Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 144089

Company Name NEW CINGULAR WIRELESS PCS, AT&T MOBILITY

Address 16201 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.

SIC Code Description

4812 RADIOTELEPHONE COMMUNICATIONS



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 442261

Facility Information

Business Name NEW CINGULAR WIRELESS PCS, AT&T MOBILITY

Facility ID 144089 Facility Status ACTIVE

Application Information

Application Type Permit to Operate without prior Permit to Construct Application Received 4/22/2005

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 5/22/2005

Equipment Desc I C E (50-500 HP) EM ELEC GEN-DIESEL

Permit Number F80625 Permit Status ACTIVE

View Permit Image

Engineer Information

Engineer Assigned HEMANG D DESAI

Engineer Phone (909) 396-2596 Team Assigned J



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 144089

Company Name NEW CINGULAR WIRELESS PCS, AT&T MOBILITY

Address 16201 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

#### **Notices Of Violation**

| Notice Number | Notice Issue Date | Violation Date | Disposition Date | Disposition |
|---------------|-------------------|----------------|------------------|-------------|
| P61802        | 1/30/2015         | 10/6/2009      |                  |             |

| First Prev Page 1 of 1 (1 records) Next Last Page 1 v Export To Excel |    |     |      |                         |      |      |      |   |   |                 |
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#### Notices To Comply

| Notice Number | Violation Date | Re-Inspection Date | Status        |
|---------------|----------------|--------------------|---------------|
| E24242        | 1/30/2015      | 2/13/2015          | In Compliance |

|            | _                       |      |      |      |   |   |                 |
|------------|-------------------------|------|------|------|---|---|-----------------|
| First Prev | Page 1 of 1 (1 records) | Next | Last | Page | 1 | ▼ | Export To Excel |



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number P61802 Violation Date 10/6/2009 Issue Date 12/31/9999 Notice Type NOV

Facility ID 144089

Company Name NEW CINGULAR WIRELESS PCS, AT&T MOBILITY

Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Violation Description Exceeded provided character space. Please view the report tab/inspector

comment. Thank you.

**Equipment Description** 

Follow Up Status

Diesel ICE Abatement

1470

Disposition

Disposition Date

Rule No. Rule Description

Requirements for Stationary Diesel-Fueled Internal Combustion and

Other



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Status

Notice Number E24242 Violation Date 1/30/2015 Issue Date 2/13/2015 Notice Type NC

Facility ID 144089

Company Name NEW CINGULAR WIRELESS PCS, AT&T MOBILITY

Address 16201 SAN FERNANDO MISSION BLVD.

GRANADA HILLS, CA 91344

Violation Description H&S 42303 - Provide and maintain proof that the engine associated with P/O

F80625 permit description coincides with the actual equipment (model and BHP).

Equipment Description ICE

In Compliance

Re-inspection Date 2/13/2015

Rule No. Rule Description

42303 Supply Information, Plans, Specs, Etc.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 118259

Company Name AB CELLULAR HOLDING LLC, #142

Address 16201 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Status DUPLICATE

Are there any back fees due?

No.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 37689

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

| Appl_Nbr | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type  | Equip_Description                       | Appl_Date | Appl_Status                  |
|----------|------------|-------------|---------------|----------|---|-----------|------------------------------|
| 114099   | M38942     | 6/21/1984   | INACTIVE      | Rasic    | DRY CLEANING EQUIP<br>PERCHLOROETHYLENE | 9/7/1983  | PERMIT TO OPERATE<br>GRANTED |
| 114099   | M38942     | 6/21/1984   | INACTIVE      | ( ontrol | ADSORBER (DRY CLEANING)<br>REGENERATIVE | 9/7/1983  | PERMIT TO OPERATE<br>GRANTED |
| 105272   |            |             |               | Rasic    | DRY CLEANING EQUIP<br>PERCHLOROETHYLENE | 1/7/1983  | APPLICATION DENIED           |

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|------------|-------------------------|------|------|------|---|---|-----------------|



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 37689

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 78232

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Status SOLD

SIC Code Description

7216 DRY CLEANING PLANTS, EXC RUG



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 78232

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

| Appl_Nbr      | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type | Equip_Description                       | Appl_Date | Appl_Status                  |
|---------------|------------|-------------|---------------|---------|---|-----------|------------------------------|
| <u>226035</u> | D25415     | 5/22/1990   | INACTIVE      | Basic   | DRY CLEANING EQUIP<br>PERCHLOROETHYLENE | 4/9/1990  | PERMIT TO OPERATE<br>GRANTED |

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Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 226035

Facility Information

Business Name GRANADA HILLS CLEANERS

Facility ID 78232 Facility Status SOLD

Application Information

Application Type Permit to Operate Application Received 4/9/1990

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 5/22/1990

Equipment Desc DRY CLEANING EQUIP PERCHLOROETHYLENE

Permit Number D25415 Permit Status INACTIVE

View Permit Image

Engineer Information

Engineer Assigned

Engineer Phone Team Assigned 10



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 78232

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 59843

Company Name GRANADA HILLS CLEANERS V&S YOUSEFIAN ETA

Address 16233 SAN FERNANDO MISSION

GRANADA HILLS, CA 91344

Status SOLD

SIC Code Description

7216 DRY CLEANING PLANTS, EXC RUG



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 165573

Facility Information

Business Name GRANADA HILLS CLEANERS V&S YOUSEFIAN ETA

Facility ID 59843 Facility Status SOLD

Application Information

Application Type Change of Ownership Application Received 1/29/1988

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete

Equipment Desc DRY CLEANING EQUIP PERCHLOROETHYLENE; VAPOR RECOVERY UNIT COMPRESS & CONDENSE

Permit Number M63162 Permit Status INACTIVE

View Permit Image

Engineer Information

**Engineer Assigned** 

Engineer Phone Team Assigned 10



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 165573

Facility Information

Business Name GRANADA HILLS CLEANERS V&S YOUSEFIAN ETA

Facility ID 59843 Facility Status SOLD

Application Information

Application Type Change of Ownership Application Received 1/29/1988

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete

Equipment Desc DRY CLEANING EQUIP PERCHLOROETHYLENE; VAPOR RECOVERY UNIT COMPRESS & CONDENSE

Permit Number M63162 Permit Status INACTIVE

View Permit Image

Engineer Information

**Engineer Assigned** 

Engineer Phone Team Assigned 10



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

| Appl_Nbr      | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type  | Equip_Description                            | Appl_Date  | Appl_Status                  |
|---------------|------------|-------------|---------------|----------|--|------------|------------------------------|
| <u>468645</u> | F92384     | 9/13/2007   | ACTIVE        | Kasic    | DRY CLEANING, DRY-TO-DRY NV, W/<br>SIC, PERC | 5/1/2007   | PERMIT TO OPERATE GRANTED    |
| <u>363521</u> | F23988     | 1/20/2000   | INACTIVE      | Kasic    | DRY CLEANING, DRY-TO-DRY NV, W/<br>SIC, PERC | 12/20/1999 | PERMIT TO OPERATE<br>GRANTED |
| <u>363521</u> | F23988     | 1/20/2000   | INACTIVE      | ( ontrol | VAPOR RECOVERY UNIT COMPRESS & CONDENSE      | 12/20/1999 | PERMIT TO OPERATE<br>GRANTED |
| <u>262046</u> | D52716     | 5/1/1992    | INACTIVE      | Kasic    | DRY CLEANING EQUIP<br>PERCHLOROETHYLENE      | 2/5/1992   | PERMIT TO OPERATE<br>GRANTED |
| <u>262046</u> | D52716     | 5/1/1992    | INACTIVE      | Control  | VAPOR RECOVERY UNIT COMPRESS & CONDENSE      | 2/5/1992   | PERMIT TO OPERATE<br>GRANTED |

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Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 468645

Facility Information

Business Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Facility ID 88157 Facility Status ACTIVE

Application Information

Application Type Change of Conditions Application Received 5/1/2007

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 5/31/2007

Equipment Desc DRY CLEANING, DRY-TO-DRY NV, W/ SIC, PERC

Permit Number F92384 Permit Status ACTIVE

View Permit Image

Engineer Information

Engineer Assigned THAI TRAN

Engineer Phone (909) 396-2562 Team Assigned J



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

#### **Notices Of Violation**

| Notice Number | Notice Issue Date | Violation Date | Disposition Date | Disposition |
|---------------|-------------------|----------------|------------------|-------------|
| P35635        | 3/27/2002         | 3/27/2002      | 4/23/2003        | Closed Case |

| First Prev Page 1 of | f 1 (1 records) | Next | Last | Page | 1_ | ▼ | Export To Excel |
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#### Notices To Comply

| Notice Number | Violation Date | Re-Inspection Date | Status        |
|---------------|----------------|--------------------|---------------|
| <u>C61376</u> | 8/4/2000       | 9/21/2000          | In Compliance |
| E03663        | 12/21/2010     | 1/19/2011          | In Compliance |
| E15515        | 7/12/2012      | 7/27/2012          | In Compliance |
| E15516        | 7/12/2012      | 7/27/2012          | In Compliance |

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|            |                         |      |      |      |     |                 |



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number P35635 Violation Date 3/27/2002 Issue Date 4/23/2003 Notice Type NOV

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

Violation Description PERC VAPOR LEAKS IN EXCESS OF 300 PPM (462 PPM ) FROM THEIR LINDUS DRY

**CLEANING MACHINE** 

Equipment Description DRY CLEANING EQUIPMENT

Follow Up Status In Compliance
Disposition Closed Case
Disposition Date 4/23/2003

Rule No. Rule Description

1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number E15516 Violation Date 7/12/2012 Issue Date 8/3/2012 Notice Type NC

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

Violation Description Provide records of daily pounds, purchase and delivery receipts for perc, dates

perc added to machine, mileage, leak checks, operation and maintenance

checklist for 2011 and 2012.

Equipment Description perchloroethylene dry cleaning

Status In Compliance

Re-inspection Date 7/27/2012

Rule No. Rule Description

42303 Supply Information, Plans, Specs, Etc.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number E15515 Violation Date 7/12/2012 Issue Date 8/3/2012 Notice Type NC

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

Violation Description Post Permit to Operate. Keep copy of permit on file at facility.

Equipment Description perchloroethylene dry cleaning

Status In Compliance

Re-inspection Date 7/27/2012

Rule No. Rule Description

206 Posting of Permit to Operate



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number E03663 Violation Date 12/21/2010 Issue Date 1/28/2011 Notice Type NC

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

Violation Description Clean cooling coils and change required gaskets (front door, sill door, button trap,

lint trap) due biannually. Provide solvent addition records, weekly leak check, and

O&M checklist.

**Equipment Description** 

Status In Compliance

Re-inspection Date 1/1

1/19/2011

| Rule No. | Rule Description  |
|----------|---|
| 1421     | Control of Perchloroethylene Emissions from Dry Cleaning Operations |
| 42303    | Supply Information, Plans, Specs, Etc.                              |



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

NOV/NC Details

Notice Number C61376 Violation Date 8/4/2000 Issue Date 12/31/9999 Notice Type NC

Facility ID 88157

Company Name GRANADA HILLS CLEANERS, VAHIK YOUSEFIAN

Address 16233 SAN FERNANDO MISSION BLV

GRANADA HILLS, CA 91344

Violation Description COMPLETE THE ANNUAL REPORT FOR 1999. UPDATE 2000 DAILY RECORDKEEPING

**Equipment Description** 

Status In Compliance

Re-inspection Date 9/21/2000

Rule No. Rule Description

1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 154876

Company Name PARTNER ENGINEERING AND SCIENCE, INC.

Address 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 479446

Facility Information

Business Name PARTNER ENGINEERING AND SCIENCE, INC.

Facility ID 154876 Facility Status ACTIVE

Application Information

Application Type Permit to Construct Application Received 3/18/2008

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 4/17/2008

Equipment Desc SOIL TREAT VAPOR EXTRACT OTHER VOC UNDER

Permit Number G1083 Permit Status INACTIVE

View Permit Image

Engineer Information

Engineer Assigned SEAN K CULLINS

Engineer Phone (909) 396-2655 Team Assigned A



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 154876

Company Name PARTNER ENGINEERING AND SCIENCE, INC.

Address 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 177439

Company Name TARGHEE

Address 16233 SAN FERNANDO MISSIONS BLVD

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 563909

Facility Information

Business Name TARGHEE

Facility ID 177439 Facility Status ACTIVE

Application Information

Application Type Permit to Construct Application Received 4/29/2014

Application Status PERMIT TO OPERATE GRANTED Application Deemed Complete 5/23/2014

Equipment Desc SOIL TREAT VAPOR EXTRACT OTHER VOC UNDER

Permit Number G35473 Permit Status ACTIVE

View Permit Image

Engineer Information

Engineer Assigned GAURANG RAWAL

Engineer Phone (909) 396-2543 Team Assigned A



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Compliance

Facility ID 177439
Company Name TARGHEE

Address 16233 SAN FERNANDO MISSIONS BLVD

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 37689

Company Name GRANADA HILLS CLEANERS

Address 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Status OUT OF BUSINESS

SIC Code Description

7216 DRY CLEANING PLANTS, EXC RUG



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 139015

Company Name BIG LOTS #4011

Address 16255 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

| Appl_Nbr | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type       | Equip_Description | Appl_Date    | Appl_Status                            |
|----------|------------|-------------|---------------|---------------|-------------------|--------------|--|
| 480055   |            |             |               | Basic         | RULE 1415 PLAN    | 3/21/2008    | BANKING/ PLAN GRANTED,                 |
| 400033   |            |             |               | NOTIFICATIONS | 3/21/2000         | NON BILLABLE |  |
| 454026   |            |             |               |               | RULE 1415 PLAN    | 2/22/2006    | BANKING/ PLAN GRANTED,                 |
| 434020   |            |             |               | Basic         | NOTIFICATIONS     | 272272000    | NON BILLABLE                           |
| 424342   |            |             |               | Basic         | RULE 1415 PLAN    | 12/21/2002   | BANKING/ PLAN GRANTED,                 |
| 424342   |            |             |               | Dasic         | NOTIFICATIONS     | 12/31/2003   | BANKING/ PLAN GRANTED,<br>NON BILLABLE |

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|       |      |                         |      |      |      |   |   |                 |



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 139015

Company Name BIG LOTS #4011

Address 16255 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 121938

Company Name PIC N SAVE STORE #4011

Address 16255 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 396714

Facility Information

Business Name PIC N SAVE STORE #4011

Facility ID 121938 Facility Status ACTIVE

Application Information

Application Type Plans & Excavation Application Received 1/25/2002

Application Status BANKING/ PLAN GRANTED, NON BILLABLE Application Deemed Complete 2/4/2002

Equipment Desc RULE 1415 PLAN NOTIFICATIONS

Permit Number Permit Status

Engineer Information

Engineer Assigned COLLEEN COLLIER

Engineer Phone (909) 396-3282 Team Assigned L



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details** 

Application/Tracking Number 365547

Facility Information

Business Name PIC N SAVE STORE #4011

Facility ID 121938 Facility Status ACTIVE

Application Information

Application Type Plans & Excavation Application Received 11:00:00

PM

Application Status BANKING/ PLAN GRANTED, NON BILLABLE Application Deemed Complete

Equipment Desc RULE 1415 PLAN NOTIFICATIONS

Permit Number Permit Status

Engineer Information

Engineer Assigned DAVID B DE BOER

Engineer Phone (909) 396-2390 Team Assigned L



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 121938

Company Name PIC N SAVE STORE #4011

Address 16255 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 139015

Company Name BIG LOTS #4011

Address 16255 SAN FERNANDO MISSION BLVD

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List** 

Facility ID 178364

Company Name GRANADA HILLS CLEANERS

Address 16285 SAN FERNANDO MISSION BLF

GRANADA HILLS, CA 91344

| Appl_Nbr      | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type | Equip_Description                    | Appl_Date | Appl_Status                  |
|---------------|------------|-------------|---------------|---------|--------------------------------------|-----------|------------------------------|
| <u>568938</u> | G33344     | 10/26/2014  | ACTIVE        | Basic   | DRY CLEANING EQUIP PETROLEUM SOLVENT | 9/5/2014  | PERMIT TO OPERATE<br>GRANTED |

| First Prev | Page 1 of 1 (1 records) | Next | Last | Page | 1 | ▼ | Export To Excel |
|------------|-------------------------|------|------|------|---|---|-----------------|



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Compliance

Facility ID 178364

Company Name GRANADA HILLS CLEANERS

Address 16285 SAN FERNANDO MISSION BLF

GRANADA HILLS, CA 91344

Notices Of Violaton: NONE

Notices To Comply: NONE



Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

Facility Details

Facility ID 178364

Company Name GRANADA HILLS CLEANERS

Address 16285 SAN FERNANDO MISSION BLF

GRANADA HILLS, CA 91344

Status ACTIVE

Are there any back fees due?

No.

SIC Code Description

7216 DRY CLEANING PLANTS, EXC RUG

#### APPENDIX V

**EDR Radius Map with GeoCheck** 

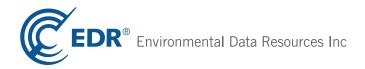
3436

16225 San Fernando Mission Blvd Granada Hills, CA 91344

Inquiry Number: 4535889.2s

February 10, 2016

# The EDR Radius Map™ Report with GeoCheck®



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**Thank you for your business.**Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

## **ADDRESS**

16225 SAN FERNANDO MISSION BLVD GRANADA HILLS, CA 91344

# COORDINATES

Latitude (North): 34.2727950 - 34° 16' 22.06" Longitude (West): 118.4857530 - 118° 29' 8.71"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 363225.3 UTM Y (Meters): 3793207.0

Elevation: 960 ft. above sea level

## USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5636833 SAN FERNANDO, CA

Version Date: 2012

Northwest Map: 5630759 OAT MOUNTAIN, CA

Version Date: 2012

## **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 20120428 Source: USDA

# MAPPED SITES SUMMARY

Target Property Address: 16225 SAN FERNANDO MISSION BLVD GRANADA HILLS, CA 91344

Click on Map ID to see full detail.

| MAP      |                                   | ADDDECC                         | DATABACE ACRONIVAC   | RELATIVE           | DIST (ft. & mi.)              |
|----------|-----------------------------------|---------------------------------|--|--------------------|-------------------------------|
| ID<br>A1 | SITE NAME<br>GRANADA HILLS CLEANE | ADDRESS<br>16233 SAN FERNANDO R | DATABASE ACRONYMS RCRA-SQG, FINDS, EMI, LA Co. Site Mitigation | ELEVATION<br>Lower | DIRECTION<br>24, 0.005, South |
| A2       |                                   | 16233 SAN FERNANDO              | EDR Hist Cleaner   | Lower              | 24, 0.005, South              |
| A3       | GRANADA HILLS CLEANE              | 16285 SAN FERNANDO M            | DRYCLEANERS  | Lower              | 26, 0.005, SW                 |
| A4       | GRANADA HILLS CLEANE              | 16285 SAN FERNANDO M            | DRYCLEANERS  | Lower              | 26, 0.005, SW                 |
| 5        | WOODLEY 1 HOUR PHOTO              | 11139 WOODLEY AVE               | RCRA-SQG, FINDS  | Higher             | 31, 0.006, ENE                |
| B6       | IN AND OUT RECYCLING              | 16201 SAN FERNANDO M            | SWRCY  | Lower              | 55, 0.010, SE                 |
| B7       |                                   | 11060 WOODLEY AVE               | EDR Hist Auto  | Lower              | 158, 0.030, SE                |
| B8       | GORDON'S MOBIL SERVI              | 16156 SF MISSION                | EDR Hist Auto  | Lower              | 189, 0.036, SE                |
| B9       | GORDON'S MOBIL SERVI              | 16156 MISSION BLVD              | EDR Hist Auto  | Lower              | 189, 0.036, SE                |
| B10      | MOBIL PRODUCTS                    | 16156 S F MISSION               | EDR Hist Auto  | Lower              | 189, 0.036, SE                |
| B11      | GORDON'S MOBIL SERVI              | 16156 S F MISSION BL            | EDR Hist Auto  | Lower              | 189, 0.036, SE                |
| B12      |                                   | 16157 SAN FERNANDO              | EDR Hist Cleaner   | Lower              | 197, 0.037, ESE               |
| B13      | H AND R AUTOMOTIVE                | 11050 WOODLEY AVE UN            | RCRA-SQG, FINDS  | Lower              | 198, 0.038, SE                |
| B14      | GRANADA HILLS TRANSM              | 11050 WOODLEY AVE #F            | RCRA-SQG, FINDS, HAZNET  | Lower              | 198, 0.038, SE                |
| B15      |                                   | 11050 WOODLEY AVE               | EDR Hist Auto  | Lower              | 198, 0.038, SE                |
| B16      |                                   | 16156 SAN FERNANDO              | EDR Hist Cleaner   | Lower              | 223, 0.042, SE                |
| B17      | ORI FOGER                         | 16156 SAN FERNANDO M            | SWEEPS UST, CA FID UST, DRYCLEANERS                            | Lower              | 223, 0.042, SE                |
| B18      | MY CLEANERS                       | 16159 S F MISSION               | EDR Hist Cleaner   | Lower              | 317, 0.060, ESE               |
| 19       | ADDAMS CONTINUATION               | 16341 DONMETZ ST                | RCRA-LQG   | Higher             | 365, 0.069, WNW               |
| 20       | LAUSD KENNEDY HIGH S              | 11254 GOTHIC AVE                | RCRA-SQG, FINDS  | Higher             | 559, 0.106, NW                |
| 21       |                                   | 16460 MCKEEVER ST               | EDR Hist Auto  | Higher             | 1152, 0.218, WNW              |

# TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

# **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

# STANDARD ENVIRONMENTAL RECORDS

| Federal NPL site list         |  |
|-------------------------------|--|
| NPL                           | National Priority List   |
| NPL LIENS                     | Proposed National Priority List Sites Federal Superfund Liens  |
|                               |  |
| Federal Delisted NPL site li  | ist  |
| Delisted NPL                  | National Priority List Deletions   |
|                               |  |
| Federal CERCLIS list          |  |
|                               | Federal Facility Site Information listing Comprehensive Environmental Response, Compensation, and Liability Information System |
| OLNOLIO                       | Complehensive Environmental Nesponse, Compensation, and Elability Information System   |
| Federal CERCLIS NFRAP s       | ite List   |
| CERCLIS-NFRAP                 | _ CERCLIS No Further Remedial Action Planned   |
|                               |  |
| Federal RCRA CORRACTS         | facilities list  |
| CORRACTS                      | Corrective Action Report   |
| Federal RCRA non-CORRA        | CTS TSD facilities list  |
|                               |  |
| RCRA-TSDF                     | RCRA - Treatment, Storage and Disposal   |
| Federal RCRA generators I     | ist  |
| RCRA-CESQG                    | RCRA - Conditionally Exempt Small Quantity Generator   |
|                               |  |
| Federal institutional control | ls / engineering controls registries   |
| LUCIS.                        | Land Use Control Information System  |
| US ENG CONTROLS               | Engineering Controls Sites List Sites with Institutional Controls  |
| OO INOT OOM INOL              | _ Olds with institutional controls   |
| Federal ERNS list             |  |
| ERNS                          | - Emergency Response Notification System   |
|                               |  |

State- and tribal - equivalent NPL

RESPONSE...... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST...... Geotracker's Leaking Underground Fuel Tank Report

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land SLIC...... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

VCP..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT...... Waste Management Unit Database

HAULERS...... Registered Waste Tire Haulers Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI\_\_\_\_\_\_Open Dump Inventory
DEBRIS REGION 9\_\_\_\_\_\_Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... National Clandestine Laboratory Register

AOCONCERN...... San Gabriel Valley Areas of Concern

HIST Cal-Sites ..... Historical Calsites Database

SCH..... School Property Evaluation Program

# Local Lists of Registered Storage Tanks

HIST UST..... Hazardous Substance Storage Container Database

#### Local Land Records

LIENS...... Environmental Liens Listing
LIENS 2...... CERCLA Lien Information
DEED...... Deed Restriction Listing

## Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System CHMIRS..... California Hazardous Material Incident Report System

LDS......Land Disposal Sites Listing
MCS.....Military Cleanup Sites Listing
SPILLS 90.....SPILLS 90 data from FirstSearch

#### Other Ascertainable Records

RCRA NonGen / NLR......... RCRA - Non Generators / No Longer Regulated

FUDS....... Formerly Used Defense Sites DOD...... Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR\_\_\_\_\_ Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

TRIS...... Toxic Chemical Release Inventory System

RAATS....... RCRA Administrative Action Tracking System

ICIS..... Integrated Compliance Information System

FTTS\_\_\_\_\_\_FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS.... Lead Smelter Sites

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File

FINDS..... Facility Index System/Facility Registry System

CA BOND EXP. PLAN..... Bond Expenditure Plan

Financial Assurance Information Listing

HAZNET..... Facility and Manifest Data

HIST CORTESE..... Hazardous Waste & Substance Site List

LOS ANGELES CO. HMS.... HMS: Street Number List

HWP..... EnviroStor Permitted Facilities Listing

HWT...... Registered Hazardous Waste Transporter Database

MINES..... Mines Site Location Listing

MWMP..... Medical Waste Management Program Listing

NPDES Permits Listing

PEST LIC..... Pesticide Regulation Licenses Listing

PROC..... Certified Processors Database

Notify 65...... Proposition 65 Records LA Co. Site Mitigation...... Site Mitigation List

UIC......UIC Listing

WASTEWATER PITS..... Oil Wastewater Pits Listing WDS..... Waste Discharge System

WIP..... Well Investigation Program Case List

#### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR MGP..... EDR Proprietary Manufactured Gas Plants

## **EDR RECOVERED GOVERNMENT ARCHIVES**

# **Exclusive Recovered Govt. Archives**

RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

# SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

## Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/09/2015 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | her Elevation Address |                         | Map ID | Page |
|------------------------|-----------------------|-------------------------|--------|------|
| ADDAMS CONTINUATION    | 16341 DONMETZ ST      | WNW 0 - 1/8 (0.069 mi.) | 19     | 21   |

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/09/2015 has revealed that there are 5 RCRA-SQG sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address              | Direction / Distance    | Map ID | Page |  |
|------------------------|----------------------|-------------------------|--------|------|--|
| WOODLEY 1 HOUR PHOTO   | 11139 WOODLEY AVE    | ENE 0 - 1/8 (0.006 mi.) | 5      | 12   |  |
| LAUSD KENNEDY HIGH S   | 11254 GOTHIC AVE     | NW 0 - 1/8 (0.106 mi.)  | 20     | 22   |  |
| Lower Elevation        | Address              | Direction / Distance    | Map ID | Page |  |
| GRANADA HILLS CLEANE   | 16233 SAN FERNANDO R | S 0 - 1/8 (0.005 mi.)   | A1     | 8    |  |
| H AND R AUTOMOTIVE     | 11050 WOODLEY AVE UN | SE 0 - 1/8 (0.038 mi.)  | B13    | 15   |  |
| GRANADA HILLS TRANSM   | 11050 WOODLEY AVE #F | SE 0 - 1/8 (0.038 mi.)  | B14    | 16   |  |

# ADDITIONAL ENVIRONMENTAL RECORDS

## Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 12/14/2015 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

| Lower Elevation                          | Address              | Direction / Distance   | Map ID | Page |  |
|--|----------------------|------------------------|--------|------|--|
| IN AND OUT RECYCLING<br>Cert Id: RC13492 | 16201 SAN FERNANDO M | SE 0 - 1/8 (0.010 mi.) | B6     | 13   |  |

# Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

| Lower Elevation   | Address              | Direction / Distance   | Map ID | Page |  |
|-------------------|----------------------|------------------------|--------|------|--|
| ORI FOGER         | 16156 SAN FERNANDO M | SE 0 - 1/8 (0.042 mi.) | B17    | 20   |  |
| Comp Number: 6797 |                      |                        |        |      |  |

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

| Lower Elevation                           | Address              | Direction / Distance   | Map ID | Page |  |
|---|----------------------|------------------------|--------|------|--|
| ORI FOGER Facility Id: 19054538 Status: I | 16156 SAN FERNANDO M | SE 0 - 1/8 (0.042 mi.) | B17    | 20   |  |

#### Other Ascertainable Records

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 08/10/2015 has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

| Lower Elevation                              | Address              | Direction / Distance   | Map ID | Page |
|--|----------------------|------------------------|--------|------|
| GRANADA HILLS CLEANE<br>EPA Id: CAL000403978 | 16285 SAN FERNANDO M | SW 0 - 1/8 (0.005 mi.) | A3     | 11   |
| GRANADA HILLS CLEANE<br>EPA Id: CAC002799477 | 16285 SAN FERNANDO M | SW 0 - 1/8 (0.005 mi.) | A4     | 11   |
| ORI FOGER<br>EPA Id: CAC002728554            | 16156 SAN FERNANDO M | SE 0 - 1/8 (0.042 mi.) | B17    | 20   |

#### **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 7 EDR Hist Auto sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation Address  |   | Direction / Distance   | Map ID                              | Page                       |  |
|---|---|--|-------------------------------------|----------------------------|--|
| Not reported  | 16460 MCKEEVER ST   | WNW 1/8 - 1/4 (0.218 mi.)  | 21                                  | 24                         |  |
| Lower Elevation   | Address   | <b>Direction / Distance</b>  | Map ID                              | Page                       |  |
| Not reported GORDON'S MOBIL SERVI GORDON'S MOBIL SERVI MOBIL PRODUCTS GORDON'S MOBIL SERVI Not reported | 11060 WOODLEY AVE<br>16156 SF MISSION<br>16156 MISSION BLVD<br>16156 S F MISSION<br>16156 S F MISSION BL<br>11050 WOODLEY AVE | SE 0 - 1/8 (0.030 mi.)<br>SE 0 - 1/8 (0.036 mi.)<br>SE 0 - 1/8 (0.038 mi.) | B7<br>B8<br>B9<br>B10<br>B11<br>B15 | 14<br>14<br>14<br>14<br>15 |  |

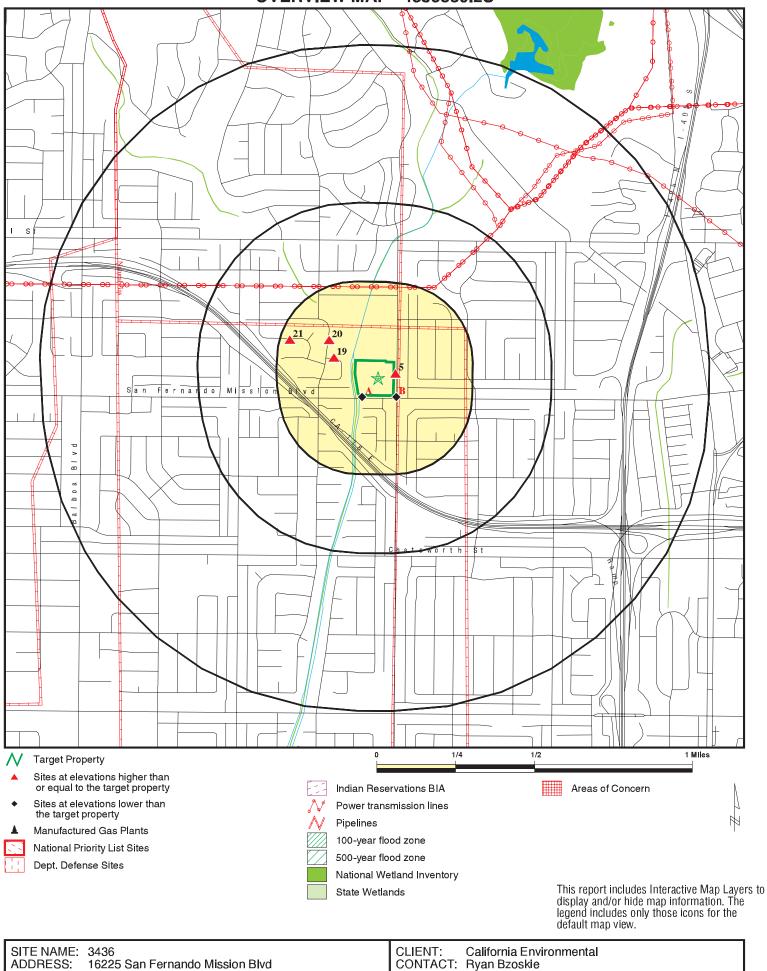
EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address            | Direction / Distance    | Map ID | Page |  |
|-----------------|--------------------|-------------------------|--------|------|--|
| Not reported    | 16233 SAN FERNANDO | S 0 - 1/8 (0.005 mi.)   | A2     | 10   |  |
| Not reported    | 16157 SAN FERNANDO | ESE 0 - 1/8 (0.037 mi.) | B12    | 15   |  |
| Not reported    | 16156 SAN FERNANDO | SE 0 - 1/8 (0.042 mi.)  | B16    | 19   |  |
| MY CLEANERS     | 16159 S F MISSION  | ESE 0 - 1/8 (0.060 mi.) | B18    | 21   |  |

There were no unmapped sites in this report.

# **OVERVIEW MAP - 4535889.2S**



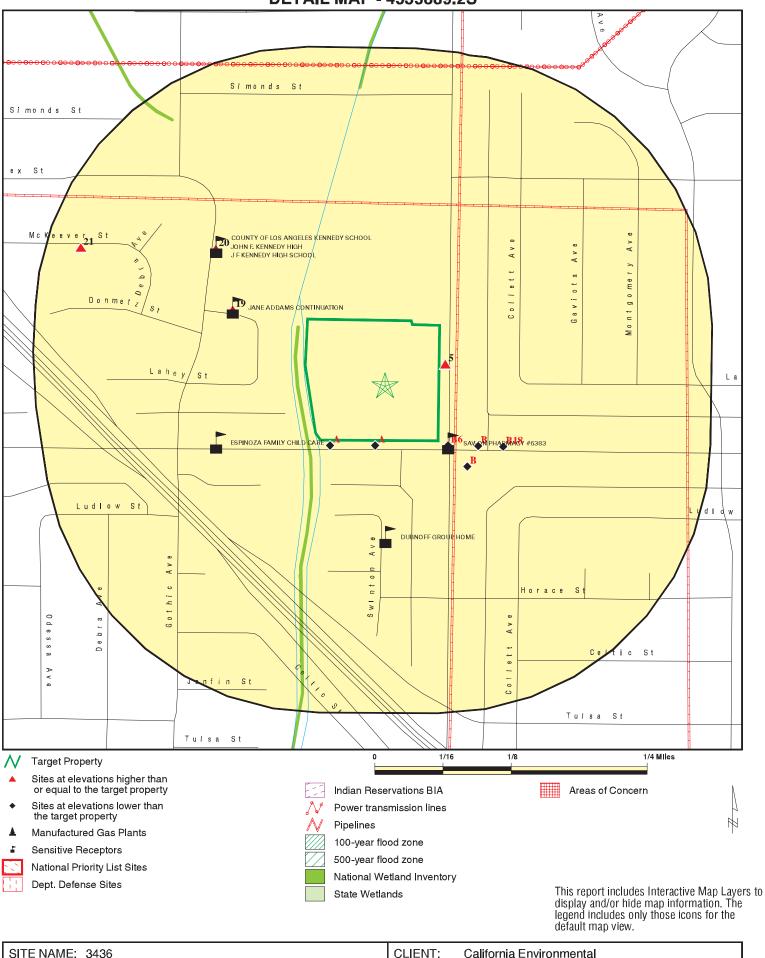
ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills CA 91344 LAT/LONG: 34.272795 / 118.485753

INQUIRY #: 4535889.2s

DATE: February 10, 2016 10:58 pm

# **DETAIL MAP - 4535889.2S**



3436 ADDRESS:

16225 San Fernando Mission Blvd

Granada Hills CA 91344 LAT/LONG: 34.272795 / 118.485753 CLIENT: California Environmental

CONTACT: Ryan Bzoskie INQUIRY #: 4535889.2s

DATE: February 10, 2016 11:00 pm

| Database  | Search<br>Distance<br>(Miles)         | Target<br>Property | < 1/8       | 1/8 - 1/4    | 1/4 - 1/2      | 1/2 - 1        | > 1            | Total<br>Plotted |
|---|---------------------------------------|--------------------|-------------|--------------|----------------|----------------|----------------|------------------|
| STANDARD ENVIRONMENT                                  | TAL RECORDS                           |                    |             |              |                |                |                |                  |
| Federal NPL site list                                 |                                       |                    |             |              |                |                |                |                  |
| NPL<br>Proposed NPL<br>NPL LIENS                      | 1.000<br>1.000<br>0.001               |                    | 0<br>0<br>0 | 0<br>0<br>NR | 0<br>0<br>NR   | 0<br>0<br>NR   | NR<br>NR<br>NR | 0<br>0<br>0      |
| Federal Delisted NPL sit                              | e list                                |                    |             |              |                |                |                |                  |
| Delisted NPL  | 1.000                                 |                    | 0           | 0            | 0              | 0              | NR             | 0                |
| Federal CERCLIS list                                  |                                       |                    |             |              |                |                |                |                  |
| FEDERAL FACILITY<br>CERCLIS                           | 0.500<br>0.500                        |                    | 0<br>0      | 0<br>0       | 0<br>0         | NR<br>NR       | NR<br>NR       | 0<br>0           |
| Federal CERCLIS NFRA                                  | P site List                           |                    |             |              |                |                |                |                  |
| CERCLIS-NFRAP   | 0.500                                 |                    | 0           | 0            | 0              | NR             | NR             | 0                |
| Federal RCRA CORRAC                                   | Federal RCRA CORRACTS facilities list |                    |             |              |                |                |                |                  |
| CORRACTS  | 1.000                                 |                    | 0           | 0            | 0              | 0              | NR             | 0                |
| Federal RCRA non-COR                                  | RACTS TSD fa                          | acilities list     |             |              |                |                |                |                  |
| RCRA-TSDF   | 0.500                                 |                    | 0           | 0            | 0              | NR             | NR             | 0                |
| Federal RCRA generator                                | rs list                               |                    |             |              |                |                |                |                  |
| RCRA-LQG<br>RCRA-SQG<br>RCRA-CESQG                    | 0.250<br>0.250<br>0.250               |                    | 1<br>5<br>0 | 0<br>0<br>0  | NR<br>NR<br>NR | NR<br>NR<br>NR | NR<br>NR<br>NR | 1<br>5<br>0      |
| Federal institutional con<br>engineering controls reg |                                       |                    |             |              |                |                |                |                  |
| LUCIS<br>US ENG CONTROLS<br>US INST CONTROL           | 0.500<br>0.500<br>0.500               |                    | 0<br>0<br>0 | 0<br>0<br>0  | 0<br>0<br>0    | NR<br>NR<br>NR | NR<br>NR<br>NR | 0<br>0<br>0      |
| Federal ERNS list                                     |                                       |                    |             |              |                |                |                |                  |
| ERNS  | 0.001                                 |                    | 0           | NR           | NR             | NR             | NR             | 0                |
| State- and tribal - equiva                            | alent NPL                             |                    |             |              |                |                |                |                  |
| RESPONSE  | 1.000                                 |                    | 0           | 0            | 0              | 0              | NR             | 0                |
| State- and tribal - equiva                            | alent CERCLIS                         | ;                  |             |              |                |                |                |                  |
| ENVIROSTOR  | 1.000                                 |                    | 0           | 0            | 0              | 0              | NR             | 0                |
| State and tribal landfill a solid waste disposal site |                                       |                    |             |              |                |                |                |                  |
| SWF/LF  | 0.500                                 |                    | 0           | 0            | 0              | NR             | NR             | 0                |
| State and tribal leaking                              | storage tank li                       | ists               |             |              |                |                |                |                  |
| LUST  | 0.500                                 |                    | 0           | 0            | 0              | NR             | NR             | 0                |

| Database   | Search<br>Distance<br>(Miles)                               | Target<br>Property | < 1/8                      | 1/8 - 1/4                          | 1/4 - 1/2                           | <u>1/2 - 1</u>                      | <u>&gt; 1</u>                    | Total<br>Plotted           |
|--|---|--------------------|----------------------------|------------------------------------|-------------------------------------|-------------------------------------|----------------------------------|----------------------------|
| INDIAN LUST<br>SLIC  | 0.500<br>0.500  |                    | 0                          | 0<br>0                             | 0<br>0                              | NR<br>NR                            | NR<br>NR                         | 0<br>0                     |
| State and tribal registered storage tank lists                         |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| FEMA UST<br>UST<br>AST<br>INDIAN UST                                   | 0.250<br>0.250<br>0.250<br>0.250                            |                    | 0<br>0<br>0<br>0           | 0<br>0<br>0<br>0                   | NR<br>NR<br>NR<br>NR                | NR<br>NR<br>NR<br>NR                | NR<br>NR<br>NR<br>NR             | 0<br>0<br>0<br>0           |
| State and tribal voluntary   | cleanup site  | es                 |                            |                                    |                                     |                                     |                                  |                            |
| INDIAN VCP<br>VCP  | 0.500<br>0.500  |                    | 0<br>0                     | 0<br>0                             | 0<br>0                              | NR<br>NR                            | NR<br>NR                         | 0<br>0                     |
| State and tribal Brownfie  |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| BROWNFIELDS  | 0.500   |                    | 0                          | 0                                  | 0                                   | NR                                  | NR                               | 0                          |
| ADDITIONAL ENVIRONMEN  | TAL RECORD  | <u>s</u>           |                            |                                    |                                     |                                     |                                  |                            |
|  |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| Local Brownfield lists   | 0.500   |                    | 0                          | 0                                  | 0                                   | ND                                  | ND                               | 0                          |
| US BROWNFIELDS   | 0.500   |                    | 0                          | 0                                  | 0                                   | NR                                  | NR                               | 0                          |
| Local Lists of Landfill / Solid<br>Waste Disposal Sites                |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| WMUDS/SWAT<br>SWRCY<br>HAULERS<br>INDIAN ODI<br>ODI<br>DEBRIS REGION 9 | 0.500<br>0.500<br>0.001<br>0.500<br>0.500<br>0.500          |                    | 0<br>1<br>0<br>0<br>0      | 0<br>0<br>NR<br>0<br>0             | 0<br>0<br>NR<br>0<br>0              | NR<br>NR<br>NR<br>NR<br>NR          | NR<br>NR<br>NR<br>NR<br>NR       | 0<br>1<br>0<br>0<br>0      |
| Local Lists of Hazardous waste / Contaminated Sites                    |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| US HIST CDL AOCONCERN HIST Cal-Sites SCH CDL Toxic Pits US CDL         | 0.001<br>1.000<br>1.000<br>0.250<br>0.001<br>1.000<br>0.001 |                    | 0<br>0<br>0<br>0<br>0<br>0 | NR<br>0<br>0<br>0<br>NR<br>0<br>NR | NR<br>0<br>0<br>NR<br>NR<br>0<br>NR | NR<br>0<br>0<br>NR<br>NR<br>0<br>NR | NR<br>NR<br>NR<br>NR<br>NR<br>NR | 0<br>0<br>0<br>0<br>0<br>0 |
| Local Lists of Registered  | l Storage Tar   | nks                |                            |                                    |                                     |                                     |                                  |                            |
| SWEEPS UST<br>HIST UST<br>CA FID UST                                   | 0.250<br>0.250<br>0.250                                     |                    | 1<br>0<br>1                | 0<br>0<br>0                        | NR<br>NR<br>NR                      | NR<br>NR<br>NR                      | NR<br>NR<br>NR                   | 1<br>0<br>1                |
| Local Land Records   |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| LIENS<br>LIENS 2<br>DEED   | 0.001<br>0.001<br>0.500                                     |                    | 0<br>0<br>0                | NR<br>NR<br>0                      | NR<br>NR<br>0                       | NR<br>NR<br>NR                      | NR<br>NR<br>NR                   | 0<br>0<br>0                |
| Records of Emergency Release Reports                                   |   |                    |                            |                                    |                                     |                                     |                                  |                            |
| HMIRS  | 0.001   |                    | 0                          | NR                                 | NR                                  | NR                                  | NR                               | 0                          |

| Database                 | Search<br>Distance<br>(Miles) | Target<br>Property | < 1/8  | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1  | > 1      | Total<br>Plotted |
|--------------------------|-------------------------------|--------------------|--------|-----------|-----------|----------|----------|------------------|
| CHMIRS                   | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| LDS                      | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| MCS                      | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| SPILLS 90                | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| Other Ascertainable Reco | ords                          |                    |        |           |           |          |          |                  |
| RCRA NonGen / NLR        | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
| FUDS                     | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| DOD                      | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| SCRD DRYCLEANERS         | 0.500                         |                    | 0      | 0         | 0         | NR       | NR       | 0                |
| US FIN ASSUR             | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| EPA WATCH LIST           | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| 2020 COR ACTION          | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
| TSCA                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| TRIS                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| SSTS                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| ROD                      | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| RMP                      | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| RAATS<br>PRP             | 0.001<br>0.001                |                    | 0<br>0 | NR<br>NR  | NR<br>NR  | NR<br>NR | NR<br>NR | 0<br>0           |
| PADS                     | 0.001                         |                    | 0      | NR<br>NR  | NR        | NR       | NR       | 0                |
| ICIS                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| FTTS                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| MLTS                     | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| COAL ASH DOE             | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| COAL ASH EPA             | 0.500                         |                    | Ö      | 0         | 0         | NR       | NR       | ő                |
| PCB TRANSFORMER          | 0.001                         |                    | Ö      | NR        | NR        | NR       | NR       | Ö                |
| RADINFO                  | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| HIST FTTS                | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| DOT OPS                  | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| CONSENT                  | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| INDIAN RESERV            | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| UMTRA                    | 0.500                         |                    | 0      | 0         | 0         | NR       | NR       | 0                |
| LEAD SMELTERS            | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| US AIRS                  | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| US MINES                 | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
| FINDS                    | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| CA BOND EXP. PLAN        | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| Cortese                  | 0.500                         |                    | 0      | 0         | 0         | NR       | NR       | 0                |
| CUPA Listings            | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
| DRYCLEANERS              | 0.250                         |                    | 3      | 0         | NR        | NK       | NR       | 3                |
| EMI<br>ENF               | 0.001                         |                    | 0      | NR<br>NR  | NR        | NR       | NR       | 0                |
| Financial Assurance      | 0.001<br>0.001                |                    | 0<br>0 | NR<br>NR  | NR<br>NR  | NR<br>NR | NR<br>NR | 0<br>0           |
| HAZNET                   | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| HIST CORTESE             | 0.500                         |                    | 0      | 0         | 0         | NR       | NR       | 0                |
| LOS ANGELES CO. HMS      | 0.001                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| HWP                      | 1.000                         |                    | 0      | 0         | 0         | 0        | NR       | 0                |
| HWT                      | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
| MINES                    | 0.230                         |                    | 0      | NR        | NR        | NR       | NR       | 0                |
| MWMP                     | 0.250                         |                    | 0      | 0         | NR        | NR       | NR       | 0                |
|                          |                               |                    | •      | -         |           |          | - • • •  | -                |

| Database               | Search<br>Distance<br>(Miles) | Target<br>Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total<br>Plotted |
|------------------------|-------------------------------|--------------------|-------|-----------|-----------|---------|-----|------------------|
| NPDES                  | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| PEST LIC               | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| PROC                   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| Notify 65              | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| LA Co. Site Mitigation | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| UIC                    | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| WASTEWATER PITS        | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| WDS                    | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| WIP                    | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| EDR HIGH RISK HISTORIC | AL RECORDS                    |                    |       |           |           |         |     |                  |
| EDR Exclusive Records  | ;                             |                    |       |           |           |         |     |                  |
| EDR MGP                | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| EDR Hist Auto          | 0.250                         |                    | 6     | 1         | NR        | NR      | NR  | 7                |
| EDR Hist Cleaner       | 0.250                         |                    | 4     | 0         | NR        | NR      | NR  | 4                |
| EDR RECOVERED GOVER    | NMENT ARCHI                   | VES                |       |           |           |         |     |                  |
| Exclusive Recovered G  | ovt. Archives                 |                    |       |           |           |         |     |                  |
| RGA LF                 | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| RGA LUST               | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| - Totals               |                               | 0                  | 22    | 1         | 0         | 0       | 0   | 23               |

# NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Actual:

956 ft.

Elevation Site Database(s) EPA ID Number

A1 GRANADA HILLS CLEANERS RCRA-SQG 1000306978
South 16233 SAN FERNANDO RD FINDS CAD982059008

< 1/8 GRANADA HILLS, CA 91344 0.005 mi.

24 ft. Site 1 of 4 in cluster A

Relative: RCRA-SQG:

**Lower** Date form received by agency: 07/15/1993

Facility name: GRANADA HILLS CLEANERS Facility address: 16233 SAN FERNANDO RD

GRANADA HILLS, CA 91344

EPA ID: CAD982059008
Contact: VAHIR YOUSEFIAN
Contact address: 16233 SAN FERNANDO RD

GRANADA HILLS, CA 91344

Contact country: US

Contact telephone: (818) 366-0012 Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: VAHIR YOUSEFIAN
Owner/operator address: 16223 SAN FERNANDO RD

GRANADA HILLS, CA 91344

Owner/operator country: Not reported
Owner/operator telephone: (818) 366-0012
Legal status: Private
Owner/Operator Type: Owner

Owner/Op end date:

Owner/Op end date:

Not reported

Not reported

Owner/operator name: NOT REQUIRED Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Not reported

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No **EDR ID Number** 

**EMI** 

LA Co. Site Mitigation

Direction Distance

Elevation Site Database(s) EPA ID Number

# **GRANADA HILLS CLEANERS (Continued)**

1000306978

**EDR ID Number** 

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002790524

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

EMI:

 Year:
 1987

 County Code:
 19

 Air Basin:
 SC

 Facility ID:
 37689

 Air District Name:
 SC

 SIC Code:
 7216

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

 Year:
 1990

 County Code:
 19

 Air Basin:
 SC

 Facility ID:
 78232

 Air District Name:
 SC

 SIC Code:
 7216

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **GRANADA HILLS CLEANERS (Continued)**

1000306978

LA Co. Site Mitigation:

FA0023310 Facility ID: Site ID: SD0000210 Jurisdiction: State Case ID: RO0000215 Abated: Not reported Kim Clark Assigned To: 02/13/2007 Entered Date:

**A2 EDR Hist Cleaner** 1015001157 N/A

South 16233 SAN FERNANDO MISSION BLVD < 1/8 **GRANADA HILLS, CA 91344** 

0.005 mi.

24 ft. Site 2 of 4 in cluster A

**EDR Historical Cleaners:** Relative:

Name: **GRANADA HILLS CLEANERS** Lower Year: 2001

Actual: Address: 16233 SAN FERNANDO MISSION BLVD

956 ft.

Name:

**GRANADA HILLS CLEANERS** 

Year: 2002

Address: 16233 SAN FERNANDO MISSION BLVD

Name: GRANADA HILLS CLEANERS INC

Year:

16233 SAN FERNANDO MISSION BLVD Address:

GRANADA HILLS CLEANERS INC Name:

Year: 2007

Address: 16233 SAN FERNANDO MISSION BLVD

GRANADA HILLS CLEANERS INC Name:

Year: 2008

Address: 16233 SAN FERNANDO MISSION BLVD

Name: **GRANADA HILLS CLEANERS** 

Year: 2010

Address: 16233 SAN FERNANDO MISSION BLVD

Name: **GRANADA HILLS CLEANERS** 

Year: 2011

16233 SAN FERNANDO MISSION BLVD Address:

Name: **GRANADA HILLS CLEANERS** 

Year: 2012

Address: 16233 SAN FERNANDO MISSION BLVD

Direction Distance

**EDR ID Number** Elevation Site **EPA ID Number** Database(s)

А3 **GRANADA HILLS CLEANERS DRYCLEANERS** S117572403 SW N/A

16285 SAN FERNANDO MISSION BLVD. **GRANADA HILLS, CA 91344** < 1/8

0.005 mi.

26 ft. Site 3 of 4 in cluster A

Relative:

DRYCLEANERS:

Lower EPA Id:

NAICS Code: 81232 Actual: NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)

954 ft.

SIC Code: Power Laundries, Family and Commercial

CAL000403978

SIC Description:

Create Date: 01/26/2015

Facility Active: Yes Inactive Date: Not reported Facility Addr2: Not reported MIKE YOUSEFIAN Owner Name:

Owner Address: 16285 SAN FERNANDO MISSION BLVD.

Owner Address 2: Not reported Owner Telephone: 8183660012 Contact Name: MIKE YOUSEFIAN 12450 JACQUELINE PL Contact Address:

Contact Address 2: Not reported Contact Telephone: 8183660012 Mailing Name: Not reported

Mailing Address 1: 16285 SAN FERNANDO MISSION BLVD.

Mailing Address 2: Not reported Mailing City: **GRANADA HILLS** 

Mailing State: CA Mailing Zip: 91344 Owner Fax: Not reported

Region Code: 3

Α4 **GRANADA HILLS CLEANERS** DRYCLEANERS \$117572378

SW 16285 SAN FERNANDO MISSION BLVD.

< 1/8 **GRANADA HILLS, CA 91344** 

0.005 mi.

26 ft. Site 4 of 4 in cluster A

Relative:

DRYCLEANERS:

Lower

CAC002799477 EPA Id:

NAICS Code: 81232

Actual: 954 ft.

NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)

SIC Code:

SIC Description: Power Laundries, Family and Commercial

Create Date: 01/09/2015 Facility Active: No Inactive Date: 04/10/2015 Not reported Facility Addr2: MIKE YOUSEFIAN Owner Name:

16285 SAN FERNANDO MISSION BLVD. Owner Address:

Owner Address 2: Not reported Owner Telephone: 8183660012 Contact Name: MIKE YOUSEFIAN

Contact Address: 16285 SAN FERNANDO MISSION BLVD.

Contact Address 2: Not reported Contact Telephone: 8183660012 Mailing Name: Not reported

16285 SAN FERNANDO MISSION BLVD. Mailing Address 1:

Mailing Address 2: Not reported N/A

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**GRANADA HILLS CLEANERS (Continued)** 

S117572378

Mailing City: GRANADA HILLS

Mailing State: CA Mailing Zip: 91344 Owner Fax: Not reported

Region Code:

**WOODLEY 1 HOUR PHOTO** RCRA-SQG 1000596825 **ENE** 11139 WOODLEY AVE **FINDS** CAD983608084

**GRANADA HILLS, CA 91344** < 1/8

0.006 mi. 31 ft.

RCRA-SQG: Relative:

Date form received by agency: 10/10/1991 Higher

WOODLEY 1 HOUR PHOTO Facility name: Actual: Facility address: 11139 WOODLEY AVE 961 ft.

GRANADA HILLS, CA 91344

EPA ID: CAD983608084 Mailing address: WOODLEY AVE

GRANADA HILLS, CA 91344

CHERYL WILCOX Contact: Contact address: 11139 WOODLEY AVE

GRANADA HILLS, CA 91344

Contact country:

Contact telephone: (818) 368-3686 Not reported Contact email:

EPA Region:

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: TIFFANY MISEROY AVE Owner/operator address: 11139 WOODLEY AVE GRANADA HILLS, CA 91344

Not reported

Owner/operator country: Owner/operator telephone: (818) 368-3686 Legal status: Private Owner/Operator Type: Owner

Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **WOODLEY 1 HOUR PHOTO (Continued)**

1000596825

SWRCY

S107137670

N/A

Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002862607

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

IN AND OUT RECYCLING **B6** SE

16201 SAN FERNANDO MISSION BLVD

< 1/8 **GRANADA HILLS, CA 91344** 

0.010 mi.

55 ft. Site 1 of 13 in cluster B

SWRCY: Relative:

Reg Id: 27144 Lower Cert Id: RC13492

Actual: Mailing Address: 14138 Leadwell St 956 ft.

Mailing City: Van Nuys Mailing State: CA Mailing Zip Code: 91405 Website: Not reported Not reported Email:

Phone Number: (818) 266-6118 Grand Father: Ν Rural: Ν

11/01/2007 Operation Begin Date:

Aluminium: Glass: Υ Plastic: Υ Υ Bimetal: Agency: N/A

Monday Hours Of Operation: 8:00 am - 5:00 pm Tuesday Hours Of Operation: 8:00 am - 5:00 pm Wednesday Hours Of Operation: 8:00 am - 5:00 pm Thursday Hours Of Operation: 8:00 am - 5:00 pm Friday Hours Of Operation: 8:00 am - 5:00 pm Saturday Hours Of Operation: 8:00 am - 5:00 pm

Sunday Hours Of Operation: **CLOSED** Organization ID: 19127

Organization Name: RC Collection 2

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**B7 EDR Hist Auto** 1015155402 N/A

11060 WOODLEY AVE SE < 1/8 **GRANADA HILLS, CA 91344** 

0.030 mi.

158 ft. Site 2 of 13 in cluster B

**EDR Historical Auto Stations:** Relative:

Lower Name: 7 DAYS AUTOMOTIVE CTR

> Year: 2003

Actual: Address: 11060 WOODLEY AVE

955 ft.

В8 **GORDON'S MOBIL SERVICE EDR Hist Auto** 1008993806 N/A

SE 16156 SF MISSION

< 1/8 **GRANADA HILLS, CA 91344** 

0.036 mi.

189 ft. Site 3 of 13 in cluster B

**EDR Historical Auto Stations:** Relative:

Name: GORDON'S MOBIL SERVICE Lower

Year: 1970

Actual: Type: Not reported 955 ft.

В9 **GORDON'S MOBIL SERVICE EDR Hist Auto** 1008993682 N/A

16156 MISSION BLVD SE < 1/8 **GRANADA HILLS, CA 91344** 

0.036 mi.

189 ft. Site 4 of 13 in cluster B

**EDR Historical Auto Stations:** Relative:

GORDON'S MOBIL SERVICE Name: Lower

Year: 1964

Actual: Not reported Type: 955 ft.

B10 **MOBIL PRODUCTS EDR Hist Auto** 1008993801 SE **16156 S F MISSION** N/A

**GRANADA HILLS, CA 91344** < 1/8

0.036 mi.

189 ft. Site 5 of 13 in cluster B

**EDR Historical Auto Stations:** Relative:

Lower Name: MOBIL PRODUCTS

Year: 1970 Actual: Not reported

Type: 955 ft.

MOBIL PRODUCTS Name:

1970 Year: Type: Not reported

Name: GORDON'S MOBIL SERVICE

Year: 1971 Type: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

B11 GORDON'S MOBIL SERVICE EDR Hist Auto 1008993685
SE 16156 S F MISSION BLVD N/A

SE 16156 S F MISSION BLVD < 1/8 GRANADA HILLS, CA 91344

0.036 mi.

189 ft. Site 6 of 13 in cluster B

Relative: EDR Historical Auto Stations:

Lower Name: GORDON'S MOBIL SERVICE

Year: 1968

Actual: Type: Not reported 955 ft.

B12 EDR Hist Cleaner 1015000783
ESE 16157 SAN FERNANDO MISSION BLVD N/A

ESE 16157 SAN FERNANDO MISSION BLVD < 1/8 GRANADA HILLS, CA 91344

0.037 mi.

197 ft. Site 7 of 13 in cluster B

Relative: EDR Historical Cleaners:

Lower Name: MY CLEANERS

Year: 2011 Actual: Address: 1615

Actual: Address: 16157 SAN FERNANDO MISSION BLVD 956 ft.

•••• ····

 B13
 H AND R AUTOMOTIVE
 RCRA-SQG
 1000596688

 SE
 11050 WOODLEY AVE UNIT 2
 FINDS
 CAD983606641

< 1/8 GRANADA HILLS, CA 91344

0.038 mi.

198 ft. Site 8 of 13 in cluster B

Relative: RCRA-SQG:

**Lower** Date form received by agency: 04/07/1993

Facility name: H AND R AUTOMOTIVE

Actual: Facility address: 11050 WOODLEY AVE UNIT 2

955 ft. GRANADA HILLS, CA 91344

EPA ID: CAD983606641

Mailing address: 11050 WOODLEY AVE GRANADA HILLS, CA 91344

Contact: HARAND VARTANIAN

Contact: HARAND VARTANIAN

Contact address: 11050 WOODLEY AVE UNIT 2

GRANADA HILLS, CA 91344

Contact country: US

Contact telephone: (818) 832-0052 Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: VARTANIAN HARAND
Owner/operator address: 11050 WOODLEY AVE
GRANADA HILLS, CA 91344

GRANADA HILLS, CA 9134

Owner/operator country: Not reported
Owner/operator telephone: (818) 832-0052
Legal status: Private

Owner/Operator Type: Owner

Direction Distance

Elevation Site Database(s) EPA ID Number

H AND R AUTOMOTIVE (Continued)

1000596688

**EDR ID Number** 

Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: Nο Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002861528

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

B14 GRANADA HILLS TRANSMISSION
SE 11050 WOODLEY AVE #F
< 1/8 GRANADA HILLS, CA 91344

FINDS HAZNET

RCRA-SQG

1004675482

CAR000073403

0.038 mi.

198 ft. Site 9 of 13 in cluster B

Relative: RCR

RCRA-SQG:

**Lower** Date form received by agency: 05/05/2000

Facility name: GRANADA HILLS TRANSMISSION Facility address: 11050 WOODLEY AVE #F

Actual: 955 ft.

GRANADA HILLS, CA 91344

EPA ID: CAR000073403

Mailing address: 11050 WOODLEY AVE #B

GRANADA HILLS, CA 91344

Contact: DAN POLOSKI

Contact address: 11050 WOODLEY AVE #B GRANADA HILLS, CA 91344

Contact country: US

Contact telephone: (818) 832-1087 Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

Distance EDR ID Number
Elevation Site EPA ID Number

#### **GRANADA HILLS TRANSMISSION (Continued)**

1004675482

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: DAN POLOSKI

Owner/operator address: 11050 WOODLEY AVE #B GRANADA HILLS, CA 91344

Owner/operator country: Not reported Owner/operator telephone: (818) 832-1087

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Waste code: D001

Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Waste code: D039

Waste name: TETRACHLOROETHYLENE

Waste code: D040

Waste name: TRICHLORETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110002937207

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

Direction Distance

Elevation Site Database(s) EPA ID Number

# **GRANADA HILLS TRANSMISSION (Continued)**

1004675482

**EDR ID Number** 

corrective action activities required under RCRA.

HAZNET:

envid: 1004675482 Year: 2001

GEPAID: CAR000073403 Contact: --

Telephone: 8128321087 Mailing Name: Not reported

Mailing Address: 11050 WOODLEY AVE #F
Mailing City,St,Zip: GRANADA HILLS, CA 913440000

Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported

Waste Category: Aqueous solution with total organic residues less than 10 percent

Disposal Method: Transfer Station

Tons: 0.24

Cat Decode: Aqueous solution with total organic residues less than 10 percent

Method Decode: Transfer Station Facility County: Los Angeles

envid: 1004675482 Year: 2000

GEPAID: CAR000073403

Contact: --

Telephone: 8128321087 Mailing Name: Not reported

Mailing Address: 11050 WOODLEY AVE #F
Mailing City,St,Zip: GRANADA HILLS, CA 913440000

Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported

Waste Category: Aqueous solution with total organic residues less than 10 percent

Disposal Method: Transfer Station

Tons: 0.12

Cat Decode: Aqueous solution with total organic residues less than 10 percent

Method Decode: Transfer Station Facility County: Los Angeles

B15 EDR Hist Auto 1015155160

SE 11050 WOODLEY AVE < 1/8 GRANADA HILLS, CA 91344

0.038 mi.

198 ft. Site 10 of 13 in cluster B

Relative: EDR Historical Auto Stations:

Lower Name: GRANADA HILLS TRANSMISSIONS

Year: 2001

Actual: Address: 11050 WOODLEY AVE 955 ft.

Name: HR AUTOMOTIVE

Year: 2002

Address: 11050 WOODLEY AVE

Name: GRANADA HILLS TRANSMISSIONS

Year: 2003

N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

(Continued) 1015155160

Address: 11050 WOODLEY AVE

JP AUTOMOTIVE Name:

Year: 2005

Address: 11050 WOODLEY AVE

B16 **EDR Hist Cleaner** 1015000781 16156 SAN FERNANDO MISSION BLVD N/A

SE < 1/8 **GRANADA HILLS, CA 91344** 

0.042 mi.

223 ft. Site 11 of 13 in cluster B

**EDR Historical Cleaners:** Relative:

**GLORY CLEANERS** Name: Lower

Year: 2001

Actual: 956 ft.

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **GLORY CLEANERS** 

Year: 2002

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **GLORY CLEANERS CORP** 

Year: 2004

16156 SAN FERNANDO MISSION BLVD Address:

Name: **Z N GLORY CLEANERS** 

Year: 2006

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **ZN GLORY CLEANERS** 

Year: 2007

Address: 16156 SAN FERNANDO MISSION BLVD

Name: Z N GLORY CLEANERS

Year: 2008

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **GLORY CLEANERS** 

Year: 2010

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **REGAL CLEANERS** 

Year:

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **GLORY CLEANERS** 

Year: 2011

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **GLORY CLEANERS** 

Year:

Address: 16156 SAN FERNANDO MISSION BLVD

Name: **REGAL CLEANERS** 

Year: 2012

16156 SAN FERNANDO MISSION BLVD Address:

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

**DRYCLEANERS** 

**B17 ORI FOGER SWEEPS UST** S101586853 16156 SAN FERNANDO MISSION BLVD SE **CA FID UST** N/A

**GRANADA HILLS, CA 91344** < 1/8

0.042 mi.

223 ft. Site 12 of 13 in cluster B

SWEEPS UST: Relative:

Status: Not reported Lower

Comp Number: 6797 Actual: Number: Not reported

956 ft. Board Of Equalization: Not reported Referral Date:

Not reported Action Date: Not reported Not reported Created Date: Not reported Owner Tank Id: SWRCB Tank Id: Not reported Tank Status: Not reported Not reported Capacity: Active Date: Not reported Tank Use: Not reported STG: Not reported Not reported Content:

Number Of Tanks: 0

CA FID UST:

19054538 Facility ID: Regulated By: UTNKI Regulated ID: Not reported Cortese Code: Not reported SIC Code: Not reported Facility Phone: 2130000000 Not reported Mail To:

Mailing Address: 16156 SAN FERNANDO MISSION BL

Mailing Address 2: Not reported

Mailing City, St, Zip: GRANADA HILLS 913440000

Contact: Not reported Not reported Contact Phone: Not reported **DUNs Number:** NPDES Number: Not reported EPA ID: Not reported Not reported Comments: Inactive Status:

DRYCLEANERS:

EPA Id: CAC002728554

NAICS Code: 81232

NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)

SIC Code:

SIC Description: Power Laundries, Family and Commercial

05/01/2013 Create Date: Facility Active: No

Inactive Date: 07/31/2013 Facility Addr2: Not reported **ASATOUR TERZIAN** Owner Name:

Owner Address: 16156 SAN FERNANDO MISSION BLVD

Owner Address 2: Not reported Owner Telephone: 8188316915

Contact Name: **ASATOUR TERZIAN** 

Direction Distance

Elevation Site Database(s) EPA ID Number

ORI FOGER (Continued) S101586853

Contact Address: 16156 SAN FERNANDO MISSION BLVD

Contact Address 2: Not reported Contact Telephone: 8188316915 Mailing Name: Not reported

Mailing Address 1: 16156 SAN FERNANDO MISSION BLVD

Mailing Address 2: Not reported Mailing City: GRANADA HILLS

Mailing State: CA
Mailing Zip: 91344
Owner Fax: Not reported

Region Code: 3

B18 MY CLEANERS EDR Hist Cleaner 1009126301

ESE 16159 S F MISSION N/A

< 1/8 GRANADA HILLS, CA 91344

0.060 mi.

317 ft. Site 13 of 13 in cluster B

Relative: EDR Historical Cleaners:

Lower Name: MY CLEANERS

Year: 1970

Actual: Type: Not reported

956 ft.

\_\_\_\_

19 ADDAMS CONTINUATION HIGH SCHOOL RCRA-LQG 1010783776 WNW 16341 DONMETZ ST CAR000191288

WNW 16341 DONMETZ ST < 1/8 GRANADA HILLS, CA 91344

0.069 mi. 365 ft.

000 1...

Relative: RCRA-LQG:
Higher Date form received by agency: 04/09/2008

Facility name: ADDAMS CONTINUATION HIGH SCHOOL

Actual: Facility address: 16341 DONMETZ ST

960 ft.

GRANADA HILLS, CA 91344

EPA ID: CAR000191288

Mailing address: 333 S BEAUDRY AVE LAUSD OEHS 20TH FL

LOS ANGELES, CA 90017

Contact: SOE AUNG

Contact address: 333 S BEAUDRY AVE LAUSD OEHS 20TH FL

LOS ANGELES, CA 90017

Contact country: US

Contact telephone: 213-241-3904

Contact email: SOE.AUNG@LAUSD.NET EPA Region: 09

Classification: Large Quantity Generator

Description: Handler: generates 1,000 kg or more of hazardous waste during any

calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less

of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely **EDR ID Number** 

Direction Distance

Elevation Site Database(s) EPA ID Number

# ADDAMS CONTINUATION HIGH SCHOOL (Continued)

1010783776

**EDR ID Number** 

hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: ADDAMS CONTINUATION HIGH SCHOOL

Owner/operator address: Not reported Not reported Owner/operator country: Not reported

Owner/operator telephone: Not reported Legal status: District Owner/Operator Type: Operator Owner/Op start date: 11/14/1989 Owner/Op end date: Not reported

Owner/operator name: LOS ANGELES UNIFIED SCHOOL DISTRICT

Owner/operator address: 333 S BEAUDRY AVE

LOS ANGELES, CA 90017

Owner/operator country: US

Owner/operator telephone: Not reported Legal status: District Owner/Operator Type: Owner Owner/Op start date: 11/14/1989 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

. Waste code: D008 . Waste name: LEAD

Violation Status: No violations found

LAUSD KENNEDY HIGH SCHOOL

11254 GOTHIC AVE

< 1/8 GRANADA HILLS, CA 91344

0.106 mi. 559 ft.

20

NW

Relative: RCRA-SQG:

**Higher** Date form received by agency: 08/20/1987

Facility name: LAUSD KENNEDY HIGH SCHOOL

Actual: Facility address: 11254 GOTHIC AVE 965 ft. GRANADA HILLS C

ft. GRANADA HILLS, CA 91344

EPA ID: CAD982024804

RCRA-SQG 1000378565

CAD982024804

FINDS

Direction Distance Elevation

vation Site Database(s) EPA ID Number

# LAUSD KENNEDY HIGH SCHOOL (Continued)

1000378565

**EDR ID Number** 

Mailing address: 1425 S SAN PEDRO ST RM 215

LOS ANGELES, CA 90015 ENVIRONMENTAL MANAGER

Contact address: 11254 GOTHIC AVE

GRANADA HILLS, CA 91344

Contact country: US

Contact:

Contact telephone: (213) 742-7371 Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Municipal
Owner/Operator Type: Operator

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: LAUSD

Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Violation Status: No violations found

Direction Distance

Elevation Site Database(s) EPA ID Number

#### LAUSD KENNEDY HIGH SCHOOL (Continued)

1000378565

**EDR ID Number** 

FINDS:

Registry ID: 110002780429

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

21 EDR Hist Auto 1015259868 WNW 16460 MCKEEVER ST N/A

1/8-1/4 GRANADA HILLS, CA 91344

0.218 mi. 1152 ft.

Relative: EDR Historical Auto Stations:

Higher Name: SHELL AUTO TECH

Year: 2002

Actual: Address: 16460 MCKEEVER ST

969 ft.

Name: SHELL AUTO TECH

Year: 2003

Address: 16460 MCKEEVER ST

Count: 0 records. ORPHAN SUMMARY

City EDR ID Site Name Site Address Zip Database(s)

NO SITES FOUND

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

# STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/30/2015 Source: EPA
Date Data Arrived at EDR: 11/07/2015 Telephone: N/A

Number of Days to Update: 58 Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/30/2015 Source: EPA
Date Data Arrived at EDR: 11/07/2015 Telephone: N/A

Number of Days to Update: 58 Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Source: EPA

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

#### Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/30/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 58

Source: EPA Telephone: N/A

Last EDR Contact: 01/26/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Quarterly

#### Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015 Date Data Arrived at EDR: 04/08/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 01/06/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810

Last EDR Contact: 11/23/2015 Next Scheduled EDR Contact: 03/07/2016

Next Scheduled EDR Contact: 03/07/20
Data Release Frequency: Quarterly

### Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Quarterly

## Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

## Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

## Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Varies

### Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 13

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Varies

## US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015 Date Data Arrived at EDR: 09/11/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 53

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/24/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Varies

## US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015 Date Data Arrived at EDR: 09/11/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 53

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/24/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Varies

# Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 12/29/2015

Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Annually

# State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/07/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 40

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

### **ENVIROSTOR:** EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/07/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 40

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Quarterly

## State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/16/2015 Date Data Arrived at EDR: 11/18/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 64

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Quarterly

# State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012

Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Varies

# LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 09/06/2011

Next Scheduled EDR Contact: 12/19/2011 Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Telephone: 707-570-3769

Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

Source: California Regional Water Quality Control Board North Coast (1)

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/13/2015 Date Data Arrived at EDR: 08/03/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 71

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/28/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015 Date Data Arrived at EDR: 01/08/2015 Date Made Active in Reports: 02/09/2015

Number of Days to Update: 32

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 01/27/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 48

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015 Date Data Arrived at EDR: 12/01/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 34

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 52

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/21/2015 Date Data Arrived at EDR: 07/29/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 76

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 67

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

from spills, leaks, and similar discharges.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011

Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: Annually

## State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 01/08/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009 Date Data Arrived at EDR: 09/10/2009 Date Made Active in Reports: 10/01/2009

Number of Days to Update: 21

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

inations).

Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 67

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 52

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Source: EPA Region 6

Date of Government Version: 05/13/2015 Date Data Arrived at EDR: 08/03/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 71

Telephone: 214-665-7591

Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 65

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/28/2015 Date Data Arrived at EDR: 08/14/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 60

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014 Date Data Arrived at EDR: 02/13/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 28

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 01/27/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 07/21/2015 Date Data Arrived at EDR: 07/29/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 76

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015 Date Data Arrived at EDR: 12/01/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 34

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Semi-Annually

## State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014 Date Data Arrived at EDR: 10/01/2014 Date Made Active in Reports: 11/06/2014

Number of Days to Update: 36

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 12/28/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/07/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 40

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Quarterly

# State and tribal Brownfields sites

**BROWNFIELDS: Considered Brownfieds Sites Listing** 

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/04/2015 Date Data Arrived at EDR: 12/08/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 44

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Varies

# ADDITIONAL ENVIRONMENTAL RECORDS

### Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/21/2015 Date Data Arrived at EDR: 09/23/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 103

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 12/21/2015

Next Scheduled EDR Contact: 04/04/2016 Data Release Frequency: Semi-Annually

## Local Lists of Landfill / Solid Waste Disposal Sites

#### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/17/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 53

Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 11/23/2015 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 58

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: No Update Planned

### Local Lists of Hazardous waste / Contaminated Sites

## US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/12/2015 Date Data Arrived at EDR: 09/04/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 60

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/31/2015

Next Scheduled EDR Contact: 12/14/2015 Data Release Frequency: No Update Planned

## HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

# SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/07/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 40

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Quarterly

# CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/18/2015

Number of Days to Update: 8

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 01/11/2016

Next Scheduled EDR Contact: 04/25/2016

Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/12/2015 Date Data Arrived at EDR: 09/04/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 60

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/25/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Quarterly

## Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/25/2015 Date Data Arrived at EDR: 12/01/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 16

Source: Department of Public Health

Telephone: 707-463-4466 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

# Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/17/2015 Date Data Arrived at EDR: 12/22/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 48

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Varies

## LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

#### DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/07/2015 Date Data Arrived at EDR: 12/08/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 44

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 12/08/2015

Next Scheduled EDR Contact: 12/21/2015 Data Release Frequency: Semi-Annually

#### Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/02/2015

Number of Days to Update: 68

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 12/30/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 09/25/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 11/16/2015

Number of Days to Update: 20

Source: Office of Emergency Services Telephone: 916-845-8400 Last EDR Contact: 01/27/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

## LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: State Water Qualilty Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

### MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

#### SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

### Other Ascertainable Records

# RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/09/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Varies

# FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 12/11/2015

Next Scheduled EDR Contact: 03/21/2016

Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS Telephone: 888-275-8747 Last EDR Contact: 01/15/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Semi-Annually

#### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 01/15/2016

Next Scheduled EDR Contact: 04/25/2016

Data Release Frequency: N/A

#### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 11/19/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Varies

#### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015 Date Data Arrived at EDR: 09/03/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 61

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 11/10/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Varies

#### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015

Number of Days to Update: 14

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/04/2016 Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 02/12/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 110

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 11/24/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Annually

#### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014

Number of Days to Update: 74

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 12/11/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015 Date Data Arrived at EDR: 08/26/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 69

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 10/15/2014 Date Made Active in Reports: 11/17/2014

Number of Days to Update: 33

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 01/12/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Annually

# ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015 Date Data Arrived at EDR: 02/06/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 31

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 01/08/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/26/2015 Date Data Arrived at EDR: 07/10/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 95

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 01/13/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 12/11/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency Telephone: 202-566-0517

Last EDR Contact: 01/29/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015 Date Data Arrived at EDR: 07/09/2015 Date Made Active in Reports: 09/16/2015

Number of Days to Update: 69

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 01/07/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501

Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

# HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 04/17/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Varies

# BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 11/24/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 01/15/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Semi-Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 11/19/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014 Date Data Arrived at EDR: 11/26/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 01/26/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 69

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 12/22/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 69

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 12/22/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2015 Date Data Arrived at EDR: 09/01/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 125

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 12/03/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 09/09/2015 Date Made Active in Reports: 11/03/2015

Number of Days to Update: 55

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 12/10/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services

Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2015 Date Data Arrived at EDR: 12/29/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 23

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 12/29/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

## **DRYCLEANERS: Cleaner Facilities**

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/10/2015 Date Data Arrived at EDR: 08/27/2015 Date Made Active in Reports: 10/01/2015

Number of Days to Update: 35

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 02/05/2016

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Annually

# EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 09/25/2015 Date Made Active in Reports: 11/05/2015

Number of Days to Update: 41

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/04/2016

Data Release Frequency: Varies

#### **ENF:** Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/18/2015 Date Data Arrived at EDR: 11/23/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 59

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 11/02/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 40

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

## Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2015 Date Data Arrived at EDR: 11/23/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 59

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Varies

#### HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 10/14/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 58

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 01/11/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the

state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/23/2015 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/24/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 10/14/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 36

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 01/13/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/17/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 53

Source: Department of Conservation

Telephone: 916-322-1080 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/10/2015 Date Data Arrived at EDR: 12/08/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 44

Source: Department of Public Health

Telephone: 916-558-1784 Last EDR Contact: 12/08/2015

Next Scheduled EDR Contact: 03/21/2016

Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/16/2015 Date Data Arrived at EDR: 11/18/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 64

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/07/2015 Date Data Arrived at EDR: 12/08/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 44

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 12/08/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

Date of Government Version: 09/14/2015 Date Data Arrived at EDR: 09/15/2015 Date Made Active in Reports: 10/14/2015

Number of Days to Update: 29

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/04/2015 Date Data Arrived at EDR: 08/25/2015 Date Made Active in Reports: 10/05/2015

Number of Days to Update: 41

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 04/04/2016
Data Release Frequency: No Update Planned

# UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 07/23/2015 Date Data Arrived at EDR: 09/15/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 28

Source: Deaprtment of Conservation Telephone: 916-445-2408

Last EDR Contact: 12/18/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Varies

### WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015 Date Data Arrived at EDR: 04/17/2015 Date Made Active in Reports: 06/23/2015

Number of Days to Update: 67

Source: RWQCB, Central Valley Region

Telephone: 559-445-5577 Last EDR Contact: 01/15/2016

Next Scheduled EDR Contact: 04/25/2016

Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/11/2016

Data Release Frequency: Varies

## **EDR HIGH RISK HISTORICAL RECORDS**

#### **EDR Exclusive Records**

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Source: EDR. Inc.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A

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Last EDR Contact: N/A
Last EDR Contact: N/A
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Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### **EDR RECOVERED GOVERNMENT ARCHIVES**

## **Exclusive Recovered Govt. Archives**

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

# **COUNTY RECORDS**

# ALAMEDA COUNTY:

### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/09/2015 Date Data Arrived at EDR: 10/13/2015 Date Made Active in Reports: 11/16/2015

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 01/11/2016

Number of Days to Update: 34 Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

## **Underground Tanks**

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/09/2015 Date Data Arrived at EDR: 10/13/2015 Date Made Active in Reports: 11/19/2015 Number of Days to Update: 37 Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 01/11/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Semi-Annually

## AMADOR COUNTY:

**CUPA Facility List** 

Cupa Facility List

Date of Government Version: 11/16/2015 Date Data Arrived at EDR: 12/10/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 42

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016

Data Release Frequency: Varies

**BUTTE COUNTY:** 

**CUPA Facility Listing** Cupa facility list.

> Date of Government Version: 11/20/2014 Date Data Arrived at EDR: 11/24/2014 Date Made Active in Reports: 01/07/2015

Number of Days to Update: 44

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 01/29/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

**CUPA Facility Listing** Cupa Facility Listing

> Date of Government Version: 10/22/2015 Date Data Arrived at EDR: 10/23/2015 Date Made Active in Reports: 11/16/2015

Number of Days to Update: 24

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 12/28/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

**COLUSA COUNTY:** 

**CUPA Facility List** Cupa facility list.

> Date of Government Version: 06/08/2015 Date Data Arrived at EDR: 09/22/2015 Date Made Active in Reports: 10/14/2015

Number of Days to Update: 22

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/01/2015 Date Data Arrived at EDR: 12/04/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 48

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Semi-Annually

**DEL NORTE COUNTY:** 

**CUPA Facility List** 

Cupa Facility list

Date of Government Version: 11/16/2015 Date Data Arrived at EDR: 11/17/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 24

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016

Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 11/30/2015 Date Data Arrived at EDR: 12/03/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 49

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016

Data Release Frequency: Varies

FRESNO COUNTY:

**CUPA Resources List** 

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/15/2015 Date Data Arrived at EDR: 10/15/2015 Date Made Active in Reports: 11/16/2015

Number of Days to Update: 32

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 01/04/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/02/2015 Date Data Arrived at EDR: 12/04/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 48

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 11/12/2015

Next Scheduled EDR Contact: 12/07/2015

Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 10/30/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 34

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016

Data Release Frequency: Varies

INYO COUNTY:

**CUPA Facility List** 

Cupa facility list.

Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 33

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016

Data Release Frequency: Varies

#### KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015 Date Data Arrived at EDR: 06/18/2015 Date Made Active in Reports: 07/22/2015

Number of Days to Update: 34

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Quarterly

### KINGS COUNTY:

## **CUPA Facility List**

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/19/2015 Date Data Arrived at EDR: 11/23/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 18

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

# LAKE COUNTY:

CUPA Facility List Cupa facility list

> Date of Government Version: 08/11/2015 Date Data Arrived at EDR: 08/14/2015 Date Made Active in Reports: 09/03/2015

Number of Days to Update: 20

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 01/19/2016

Next Scheduled EDR Contact: 05/02/2016 Data Release Frequency: Varies

## LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009

Number of Days to Update: 206

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 04/04/2016
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014 Date Data Arrived at EDR: 01/30/2015 Date Made Active in Reports: 03/04/2015

Number of Days to Update: 33

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 01/08/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/19/2015 Date Data Arrived at EDR: 10/20/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 30

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 01/20/2016

Next Scheduled EDR Contact: 05/02/2016

Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2015 Date Data Arrived at EDR: 07/27/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 14

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 01/19/2016

Next Scheduled EDR Contact: 05/02/2016

Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015 Date Data Arrived at EDR: 01/29/2015 Date Made Active in Reports: 03/10/2015

Number of Days to Update: 40

Source: Community Health Services Telephone: 323-890-7806

Last EDR Contact: 01/19/2016

Next Scheduled EDR Contact: 05/02/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/02/2015 Date Made Active in Reports: 04/13/2015

Number of Days to Update: 11

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/02/2016 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 34

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/12/2016 Date Data Arrived at EDR: 01/15/2016 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 24

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 01/11/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Semi-Annually

MADERA COUNTY:

## **CUPA Facility List**

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/15/2015 Date Data Arrived at EDR: 09/17/2015 Date Made Active in Reports: 10/14/2015

Number of Days to Update: 27

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Varies

## MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 10/05/2015 Date Data Arrived at EDR: 10/08/2015 Date Made Active in Reports: 10/15/2015

Number of Days to Update: 7

Source: Public Works Department Waste Management

Telephone: 415-499-6647 Last EDR Contact: 01/19/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Semi-Annually

# MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/18/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 34

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 12/10/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Varies

# MONO COUNTY:

CUPA Facility List CUPA Facility List

> Date of Government Version: 11/24/2015 Date Data Arrived at EDR: 12/01/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 51

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Varies

## MONTEREY COUNTY:

**CUPA Facility Listing** 

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/01/2015 Date Data Arrived at EDR: 10/06/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 66

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016

Data Release Frequency: Varies

### NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011 Date Data Arrived at EDR: 12/06/2011 Date Made Active in Reports: 02/07/2012

Number of Days to Update: 63

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/16/2008 Date Made Active in Reports: 02/08/2008

Number of Days to Update: 23

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: No Update Planned

**NEVADA COUNTY:** 

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/16/2015 Date Data Arrived at EDR: 11/17/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 24

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 11/01/2015 Date Data Arrived at EDR: 11/17/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 65

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/10/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/03/2015 Date Data Arrived at EDR: 08/10/2015 Date Made Active in Reports: 09/11/2015

Number of Days to Update: 32

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/10/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/01/2015 Date Data Arrived at EDR: 11/11/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 36

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/11/2015

Next Scheduled EDR Contact: 02/22/2016 Data Release Frequency: Quarterly

PLACER COUNTY:

#### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 12/11/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 41

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Semi-Annually

### RIVERSIDE COUNTY:

# Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/26/2015 Date Data Arrived at EDR: 10/28/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 22

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 04/04/2016 Data Release Frequency: Quarterly

## Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/26/2015 Date Data Arrived at EDR: 10/28/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 22

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 04/04/2016 Data Release Frequency: Quarterly

# SACRAMENTO COUNTY:

### Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/03/2015 Date Data Arrived at EDR: 10/06/2015 Date Made Active in Reports: 11/16/2015

Number of Days to Update: 41

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 01/05/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Quarterly

# Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/03/2015 Date Data Arrived at EDR: 10/06/2015 Date Made Active in Reports: 11/06/2015

Number of Days to Update: 31

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 01/05/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

## **Hazardous Material Permits**

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/18/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Quarterly

#### SAN DIEGO COUNTY:

#### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013 Date Data Arrived at EDR: 09/24/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 23

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Quarterly

#### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015 Date Data Arrived at EDR: 11/07/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 58

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

#### **Environmental Case Listing**

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010

Number of Days to Update: 24

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: No Update Planned

#### SAN FRANCISCO COUNTY:

#### **Local Oversite Facilities**

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Quarterly

#### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010 Date Data Arrived at EDR: 03/10/2011 Date Made Active in Reports: 03/15/2011

Number of Days to Update: 5

Source: Department of Public Health Telephone: 415-252-3920 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Quarterly

#### SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2015 Date Data Arrived at EDR: 12/22/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 48

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 04/04/2016 Data Release Frequency: Semi-Annually

#### SAN LUIS OBISPO COUNTY:

**CUPA Facility List** 

Cupa Facility List.

Date of Government Version: 12/07/2015 Date Data Arrived at EDR: 12/10/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 42

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/07/2016

Data Release Frequency: Varies

#### SAN MATEO COUNTY:

#### **Business Inventory**

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 10/14/2015 Date Data Arrived at EDR: 10/15/2015 Date Made Active in Reports: 11/16/2015

Number of Days to Update: 32

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 12/14/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Annually

#### Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 12/17/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 53

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 12/10/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Semi-Annually

#### SANTA BARBARA COUNTY:

#### **CUPA Facility Listing**

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011 Date Data Arrived at EDR: 09/09/2011 Date Made Active in Reports: 10/07/2011

Number of Days to Update: 28

Source: Santa Barbara County Public Health Department

Telephone: 805-686-8167 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Varies

#### SANTA CLARA COUNTY:

Cupa Facility List Cupa facility list

Date of Government Version: 11/18/2015 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 17

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009

Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014

Number of Days to Update: 13

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 11/23/2015

Next Scheduled EDR Contact: 03/14/2016 Data Release Frequency: Annually

**Hazardous Material Facilities** 

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/17/2015 Date Data Arrived at EDR: 11/23/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 59

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

**CUPA Facility List** 

CUPA facility listing.

Date of Government Version: 11/18/2015 Date Data Arrived at EDR: 11/23/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 18

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016

Data Release Frequency: Varies

SHASTA COUNTY:

**CUPA Facility List** 

Cupa Facility List.

Date of Government Version: 12/09/2015 Date Data Arrived at EDR: 12/10/2015 Date Made Active in Reports: 01/21/2016

Number of Days to Update: 42

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 11/18/2015

Next Scheduled EDR Contact: 03/07/2016

Data Release Frequency: Varies

SOLANO COUNTY:

#### Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 10/30/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 09/10/2015

Next Scheduled EDR Contact: 12/28/2015 Data Release Frequency: Quarterly

#### **Underground Storage Tanks**

Underground storage tank sites located in Solano county.

Date of Government Version: 10/30/2015 Date Data Arrived at EDR: 12/14/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 56

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 12/10/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

#### SONOMA COUNTY:

#### Cupa Facility List

Cupa Facility list

Date of Government Version: 09/28/2015 Date Data Arrived at EDR: 09/30/2015 Date Made Active in Reports: 11/05/2015

Number of Days to Update: 36

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 01/11/2016

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Varies

#### Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/05/2016 Date Data Arrived at EDR: 01/07/2016 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 32

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 12/23/2015

Next Scheduled EDR Contact: 04/11/2016 Data Release Frequency: Quarterly

#### SUTTER COUNTY:

#### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/07/2015 Date Data Arrived at EDR: 12/08/2015 Date Made Active in Reports: 12/17/2015

Number of Days to Update: 9

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 12/04/2015

Next Scheduled EDR Contact: 03/21/2016 Data Release Frequency: Semi-Annually

#### TUOLUMNE COUNTY:

#### **CUPA Facility List**

Cupa facility list

Date of Government Version: 10/29/2015 Date Data Arrived at EDR: 10/30/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 42

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Varies

#### **VENTURA COUNTY:**

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 08/17/2015 Date Made Active in Reports: 09/03/2015

Number of Days to Update: 17

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 12/30/2015

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 11/13/2015

Next Scheduled EDR Contact: 02/29/2016 Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/28/2015 Date Data Arrived at EDR: 10/28/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 22

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 01/25/2016

Next Scheduled EDR Contact: 05/09/2016 Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/30/2015 Date Data Arrived at EDR: 12/17/2015 Date Made Active in Reports: 02/08/2016

Number of Days to Update: 53

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 12/17/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 10/19/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 11/19/2015

Number of Days to Update: 23

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 04/18/2016 Data Release Frequency: Annually

YUBA COUNTY:

**CUPA Facility List** 

CUPA facility listing for Yuba County.

Date of Government Version: 11/13/2015 Date Data Arrived at EDR: 11/17/2015 Date Made Active in Reports: 12/11/2015

Number of Days to Update: 24

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 02/01/2016

Next Scheduled EDR Contact: 05/16/2016

Data Release Frequency: Varies

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 11/16/2015

Next Scheduled EDR Contact: 02/29/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/12/2015

Number of Days to Update: 26

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 01/15/2016

Next Scheduled EDR Contact: 04/25/2016 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 11/02/2015 Date Data Arrived at EDR: 11/08/2015 Date Made Active in Reports: 12/09/2015

Number of Days to Update: 31

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 02/03/2016

Next Scheduled EDR Contact: 05/16/2016 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/18/2015

Number of Days to Update: 25

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 01/19/2016

Next Scheduled EDR Contact: 05/02/2016 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 06/19/2015 Date Made Active in Reports: 07/15/2015

Number of Days to Update: 26

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 11/19/2015

Next Scheduled EDR Contact: 03/07/2016 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 03/19/2015 Date Made Active in Reports: 04/07/2015

Number of Days to Update: 19

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/09/2015

Next Scheduled EDR Contact: 03/28/2016 Data Release Frequency: Annually

#### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

#### Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

#### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish & Game

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### STREET AND ADDRESS INFORMATION

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#### **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

3436 16225 SAN FERNANDO MISSION BLVD GRANADA HILLS, CA 91344

#### **TARGET PROPERTY COORDINATES**

Latitude (North): 34.272795 - 34° 16' 22.06" Longitude (West): 118.485753 - 118° 29' 8.71"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 363225.3 UTM Y (Meters): 3793207.0

Elevation: 960 ft. above sea level

#### **USGS TOPOGRAPHIC MAP**

Target Property Map: 5636833 SAN FERNANDO, CA

Version Date: 2012

Northwest Map: 5630759 OAT MOUNTAIN, CA

Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

#### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

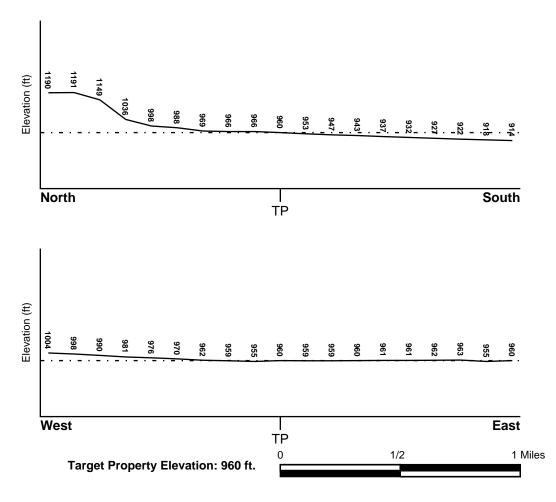
#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE** 

FEMA Flood

Target Property County LOS ANGELES, CA

Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

06037C - FEMA DFIRM Flood data

Additional Panels in search area:

Not Reported

**NATIONAL WETLAND INVENTORY** 

NWI Electronic

**NWI Quad at Target Property** 

Data Coverage

NOT AVAILABLE

YES - refer to the Overview Map and Detail Map

#### **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### Site-Specific Hydrogeological Data\*:

Search Radius: 1.25 miles Status: Not found

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

 MAP ID
 FROM TP
 GROUNDWATER FLOW

 Not Reported
 GROUNDWATER FLOW

#### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

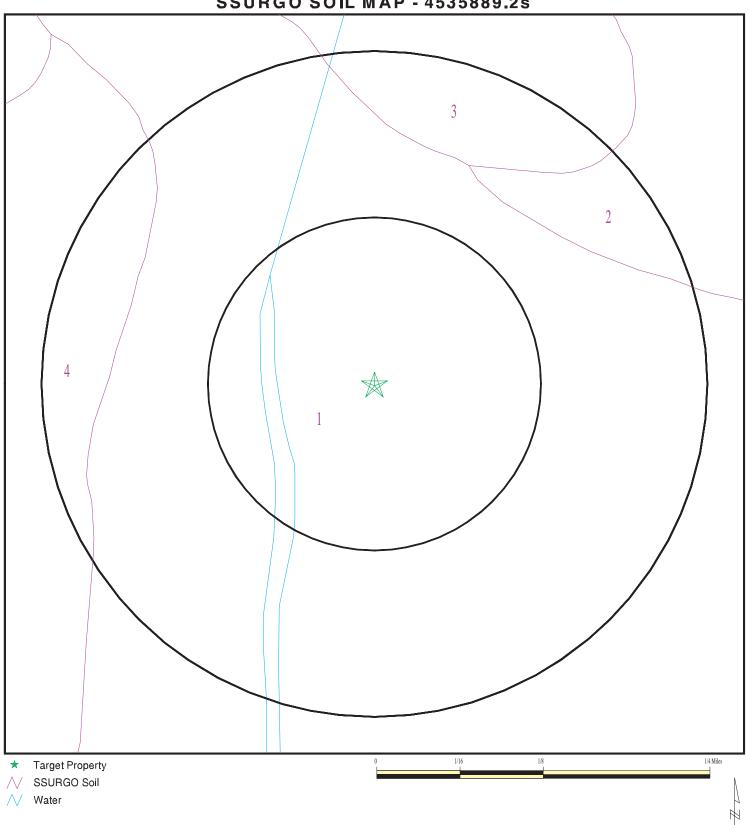
Era: Cenozoic Category: Stratifed Sequence

System: Quaternary Series: Quaternary

Code: Q (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

#### **SSURGO SOIL MAP - 4535889.2s**



SITE NAME: 3436 ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills CA 91344 LAT/LONG: 34.272795 / 118.485753 California Environmental

CLIENT: California Envi CONTACT: Ryan Bzoskie INQUIRY#: 4535889.2s

DATE: February 10, 2016 11:02 pm

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Conejo

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |   |                             |                      |
|------------------------|-----------|-----------|--------------------|---|---|-----------------------------|----------------------|
| Layer                  | Boundary  |           |                    | Classification  |   | Saturated<br>hydraulic      |                      |
|                        | Upper     | Lower     | Soil Texture Class | AASHTO Group  | Unified Soil  | conductivity<br>micro m/sec | Soil Reaction (pH)   |
| 1                      | 0 inches  | 35 inches | clay loam          | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay | Max: 4<br>Min: 1.4          | Max: 7.8<br>Min: 6.1 |
| 2                      | 35 inches | 74 inches | loam               | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), Lean Clay | Max: 4<br>Min: 1.4          | Max: 8.4<br>Min: 7.4 |

#### Soil Map ID: 2

Soil Component Name: Capistrano

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

|       | Soil Layer Information |           |                    |  |   |                             |                      |  |
|-------|------------------------|-----------|--------------------|--|---|-----------------------------|----------------------|--|
|       | Boundary               |           |                    | Classification   |   | Saturated<br>hydraulic      |                      |  |
| Layer | Upper                  | Lower     | Soil Texture Class | AASHTO Group   | Unified Soil  | conductivity<br>micro m/sec | Soil Reaction (pH)   |  |
| 1     | 0 inches               | 40 inches | fine sandy loam    | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.                | COARSE-GRAINED<br>SOILS, Sands,<br>Sands with fines,<br>Silty Sand.                 | Max: 42<br>Min: 14          | Max: 8.4<br>Min: 6.1 |  |
| 2     | 40 inches              | 72 inches | loam               | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Silty<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit less than<br>50%), silt. | Max: 14<br>Min: 4           | Max: 8.4<br>Min: 6.6 |  |

#### Soil Map ID: 3

Soil Component Name: Anacapa

Soil Surface Texture: sandy loam

Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse Hydrologic Group:

textures.

Well drained Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

|       | Soil Layer Information |           |                      |  |   |                             |                      |  |
|-------|------------------------|-----------|----------------------|--|---|-----------------------------|----------------------|--|
|       | Boundary               |           |                      | Classification   |   | Saturated hydraulic         |                      |  |
| Layer | Upper                  | Lower     | Soil Texture Class   | AASHTO Group   | Unified Soil  | conductivity<br>micro m/sec | Soil Reaction (pH)   |  |
| 1     | 0 inches               | 24 inches | sandy loam           | Granular<br>materials (35<br>pct. or less<br>passing No.<br>200), Silty, or<br>Clayey Gravel<br>and Sand.    | COARSE-GRAINED<br>SOILS, Sands,<br>Sands with fines,<br>Silty Sand. | Max: 42<br>Min: 14          | Max: 7.8<br>Min: 6.6 |  |
| 2     | 24 inches              | 48 inches | sandy loam           | Granular<br>materials (35<br>pct. or less<br>passing No.<br>200), Silty, or<br>Clayey Gravel<br>and Sand.    | COARSE-GRAINED<br>SOILS, Sands,<br>Sands with fines,<br>Silty Sand. | Max: 42<br>Min: 14          | Max: 8.4<br>Min: 7.9 |  |
| 3     | 48 inches              | 72 inches | coarse sandy<br>loam | Granular<br>materials (35<br>pct. or less<br>passing No.<br>200), Stone<br>Fragments,<br>Gravel and<br>Sand. | COARSE-GRAINED<br>SOILS, Sands,<br>Sands with fines,<br>Silty Sand. | Max: 42<br>Min: 14          | Max: 8.4<br>Min: 7.9 |  |

#### Soil Map ID: 4

Soil Component Name: Cropley

Soil Surface Texture: clay

Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse Hydrologic Group:

textures.

Soil Drainage Class: Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

|       | Soil Layer Information |           |                    |   |   |                             |                      |  |
|-------|------------------------|-----------|--------------------|---|---|-----------------------------|----------------------|--|
| Layer | Boundary               |           |                    | Classification  |   | Saturated<br>hydraulic      |                      |  |
|       | Upper                  | Lower     | Soil Texture Class | AASHTO Group  | Unified Soil  | conductivity<br>micro m/sec | Soil Reaction (pH)   |  |
| 1     | 0 inches               | 35 inches | clay               | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit 50% or<br>more), Fat Clay. | Max: 1.4<br>Min: 0.42       | Max: 8.4<br>Min: 7.4 |  |
| 2     | 35 inches              | 64 inches | clay               | Silt-Clay<br>Materials (more<br>than 35 pct.<br>passing No.<br>200), Clayey<br>Soils. | FINE-GRAINED<br>SOILS, Silts and<br>Clays (liquid<br>limit 50% or<br>more), Fat Clay. | Max: 1.4<br>Min: 0.42       | Max: 8.4<br>Min: 7.4 |  |

#### **LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

| DATABASE         | SEARCH DISTANCE (miles)        |  |
|------------------|--------------------------------|--|
| Federal USGS     | 1.000                          |  |
| Federal FRDS PWS | Nearest PWS within 0.001 miles |  |
| State Database   | 1 000                          |  |

#### FEDERAL USGS WELL INFORMATION

MAP ID WELL ID FROM TP

No Wells Found

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

MAP ID WELL ID LOCATION FROM TP

1 CADW60000005645 1/2 - 1 Mile SW

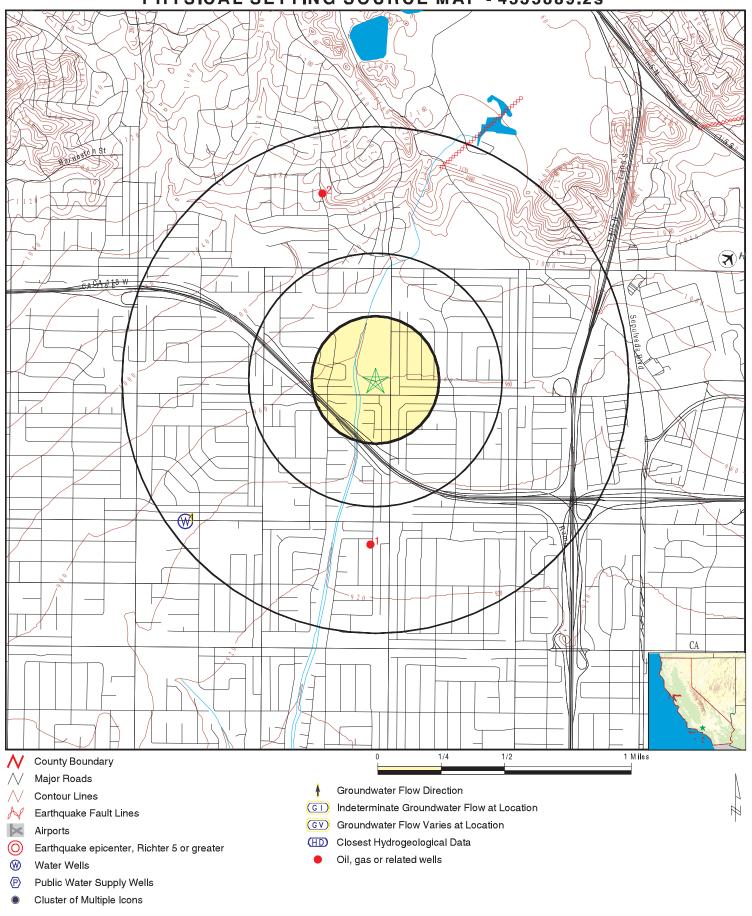
#### OTHER STATE DATABASE INFORMATION

#### STATE OIL/GAS WELL INFORMATION

MAP ID WELL ID FROM TP

1 CAOG11000280889 1/2 - 1 Mile South 2 CAOG11000280718 1/2 - 1 Mile NNW

#### PHYSICAL SETTING SOURCE MAP - 4535889.2s



SITE NAME: 3436

ADDRESS: 16225 San Fernando Mission Blvd

Granada Hills CA 91344 LAT/LONG: 34.272795 / 118.485753 CLIENT: California Environmental CONTACT: Ryan Bzoskie

INQUIRY #: 4535889.2s

DATE: February 10, 2016 11:02 pm

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#### **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance

Elevation Database EDR ID Number

1 SW

**CA WELLS** CADW6000005645

1/2 - 1 Mile Lower

> Objectid: 5645 Latitude: 34.264697 Longitude: -118.498858

Site code: 342647N1184989W001 State well numbe: 02N15W18D001S

Local well name: '4803B' Well use id: 1

Well use descrip: Observation

County id: 19

County name: Los Angeles Basin code: '4-12'

Basin desc:

San Fernando Valley

Dwr region id: 80238

Dwr region: Southern Region Office Site id: CADW60000005645

#### **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance

Distance Database EDR ID Number

South OIL\_GAS CAOG11000280889 1/2 - 1 Mile

 District nun:
 2
 Api number:
 03705961

 Blm well:
 N
 Redrill can:
 No

 Dryhole:
 Y
 Well status:
 P

Operator name: Chevron U.S.A. Inc.

County name:Los AngelesFieldname:Any FieldArea name:Any AreaSection:18Township:02NRange:15W

Base meridian: SB Elevation: Not Reported Locationde: Not Reported

Gissourcec: hud
Comments: Not Reported

Leasename:CoffmanWellnumber:1Epawell:NHydraulica:N

Confidenti: N Spuddate: Not Reported

Welldeptha: 0
Redrillfoo: 0

1/2 - 1 Mile

Abandonedd: Not Reported Completion: Not Reported

Directiona: Not Directionally drilled Gissymbol: PDH

Site id: CAOG11000280889

2 NNW OIL\_GAS CAOG11000280718

 District nun:
 2
 Api number:
 03705385

 Blm well:
 N
 Redrill can:
 No

 Dryhole:
 Y
 Well status:
 P

Operator name: Exeter Oil Company, Ltd.

County name:Los AngelesFieldname:Any FieldArea name:Any AreaSection:6Township:02NRange:15WBase meridian:SBElevation:Not Reported

Base meridian: SB Elevation: Not Locationde: Not Reported

Gissourcec: hud Comments: Not Reported

Leasename: Exeter-Elerath Wellnumber: 1
Epawell: N Hydraulica: N

Confidenti: N Spuddate: Not Reported

Welldeptha: 0
Redrillfoo: 0

Abandonedd: Not Reported Completion: Not Reported Directiona: Not Directionally drilled Gissymbol: PDH

Site id: CAOG11000280718

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

#### AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---------|-----------|-----------|
|         |           |           |
| 91344   | 175       | 28        |

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91344

Number of sites tested: 3

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L Living Area - 1st Floor 1.367 pCi/L 100% 0% 0% Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported Not Reported Basement Not Reported Not Reported Not Reported

#### PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish & Game

Telephone: 916-445-0411

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

#### PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

#### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

#### OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### RADON

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208 Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

#### PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

#### STREET AND ADDRESS INFORMATION

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# APPENDIX G NOISE REPORT

# ENVIRONMENTAL NOISE IMPACT ANALYSIS FOR THE WOODLEY & SAN FERNANDO MISSION MIXED-USE PROJECT

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#### ENVIRONMENTAL NOISE IMPACT ANALYSIS

#### FOR THE

## WOODLEY & SAN FERNANDO MISSION MIXED-USE PROJECT

#### INTRODUCTION

This Environmental Noise Impact Analysis has been prepared to evaluate the potential noise impacts associated with the proposed Woodley & San Fernando Mission mixed-use project. The purpose of this analysis is to evaluate the construction-related and operational noise and ground-borne vibration impacts of the project on the surrounding (off-site) areas.

This Environmental Noise Impact Analysis will be used to support the Mitigated Negative Declaration that is prepared for the proposed project.

#### **SUMMARY**

The construction-related impact of the proposed project would be less than significant with the required compliance with the noise regulations under Section 41.40 of the Los Angeles Municipal Code (LAMC). Operation of the proposed project would not expose persons to or generate noise levels in excess of standards established by the City of Los Angeles and the operational impact of the proposed project would be less than significant.

Construction and operation of the proposed project would not expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.

Operation of the proposed project would not generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Construction of the proposed project would generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Compliance with the noise regulations in Section 41.40 of the LAMC would reduced the impact to a less than significant level.

The proposed project would not expose people residing or working in the project area to excessive noise levels within an area covered by an airport land use plan.

The proposed project would not expose people residing or working in the project area to excessive noise levels in the vicinity of a private airstrip.

#### PROJECT DESCRIPTION

The proposed project site is located at 11147 N. Woodley Avenue and 16201–16301 W. San Fernando Mission Boulevard in the Granada Hills-Knollwood community of the City of Los Angeles. The site is largely bounded by Woodley Avenue on the east, San Fernando Mission Boulevard on the south, the Bull Creek storm channel on the west, and sports fields associated with John F. Kennedy High Schools to the north. A parcel containing a Taco Bell restaurant at the northwestern corner of Woodley Avenue and San Fernando Mission Boulevard is not part of the project site. Single family residences are located further to the east, south, and west of the site across the roadway and storm channel.

The project site is approximately 7.95 acres (346,245 square feet) in area and is currently developed with a 75,391 square-foot commercial center consisting of three buildings which include a 35,000-square-foot DMV office, 6,200 square feet of medical office, 12,410 square feet of restaurants (10,000-square-foot Chuck E Cheese, 1,050-square-foot Golden Wall Chinese, and 1,360-square-foot House of Grill), a 1,250-square-foot fast food restaurant without drive through (Mighty Mouth Burgers), 19,257 square feet of retail, and 1,274 square feet of space used for religious services. The site also includes surface parking and a batting cages facility. The existing commercial center has two driveways on San Fernando Mission Boulevard and two driveways on Woodley Avenue. Paved asphalt parking lots are located in the northeastern, eastern, and southern portion of the project site.

The project site has a General Plan land use designation of Community Commercial and is zoned C1-1VL (Limited Commercial – Height District 1VL). It is also designated as Commercial in the Granada Hills-Knollwood Community Plan.

The proposed project involves the proposed demolition of the existing uses at the site and the construction of three new buildings providing 440 residential units and approximately 64,650 square feet of commercial retail space. The retail uses would be located along the Woodley Avenue street frontage, with a proposed grocery store oriented along the San Fernando Mission Boulevard frontage. The proposed housing units would be located with two levels over the retail along Woodley Avenue, three levels over the grocery store, and four levels over a parking garage at the northwest corner of the site. One level of subterranean parking would also be provided throughout the majority of the site beneath the three new buildings. A total of 937 parking spaces would be provided with 585 of the spaces provided below ground for residents and 352 spaces provided in subterranean and surface spaces for commercial patrons. A loading dock containing two truck bays would be provided along the western side of the grocery store.

Construction activities would occur over a period of approximately 28 months with an anticipated start in the second quarter of 2017. Excavation for the subterranean parking structure is expected to require the export of approximately 165,000 cubic yards of soil from the site.

#### **BACKGROUND INFORMATION**

#### Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources, such as an occasional aircraft or train passing by to virtually continuous noise sources like traffic on a major highway.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- $L_{eq}$  The equivalent energy noise level is the average acoustic energy content of noise for a stated period of time. Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L<sub>min</sub> The minimum instantaneous noise level experienced during a given period of time.
- L<sub>max</sub> The maximum instantaneous noise level experienced during a given period of time.
- $\bullet$  CNEL The Community Noise Equivalent Level is a 24-hour average  $L_{eq}$  with a 10 dBA "penalty" added to noise during the hours of 10:00 P.M. to 7:00 A.M., and an additional 5 dBA penalty during the hours of 7:00 P.M. to 10:00 P.M. to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour  $L_{eq}$  would result in a measurement of 66.7 dBA CNEL.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low

daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

When evaluating changes in 24-hour community noise levels, a difference of 3 dBA is a barely perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness. Because decibels are logarithmic units, sound levels cannot be added or subtracted by ordinary arithmetic means. For example, if one source generates 50 dBA, two units would not generate 100 dBA; they would generate 53 dBA. A doubling of sound energy is needed to increase sound levels by 3 dBA. An increase of 5 dBA requires more than a tripling of sound energy.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally more than 30 dBA.

#### Fundamentals of Environmental Ground-borne Vibration

Environmental vibration is sound radiated through the ground. Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby, creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as ground-borne vibration. Ground-borne vibration is measured as peak particle velocity (PPV) in inches per second. The general human response to different levels of ground-borne vibration velocity levels is described below in Table 1. Ground-borne vibration levels that could induce potential damage to buildings are identified in Table 2.

TABLE 1 - HUMAN RESPONSE TO LEVELS OF GROUND-BORNE VIBRATION

|                        | Maximum PPV in Inches per Second |   |  |  |
|------------------------|----------------------------------|---|--|--|
| Human Response         | Transient Sources                | Continuous/Frequent<br>Intermittent Sources |  |  |
| Barely Perceptible     | 0.04                             | 0.01  |  |  |
| Distinctly Perceptible | 0.25                             | 0.04  |  |  |
| Strongly Perceptible   | 0.9                              | 0.1   |  |  |
| Severe                 | 2                                | 0.4   |  |  |

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source of table data: California Department of Transportation, 2004.

TABLE 2 - GROUND-BORNE VIBRATION DAMAGE POTENTIAL CRITERIA

|  | Maximum PPV in Inches per Second |   |  |
|--|----------------------------------|---|--|
| Structure and Condition  | Transient<br>Sources             | Continuous/Frequent<br>Intermittent Sources |  |
| Extremely Fragile Historic Buildings, Ruins, Ancient Monuments | 0.12                             | 0.08  |  |
| Fragile Buildings  | 0.2                              | 0.1   |  |
| Historic and Some Old Buildings                                | 0.5                              | 0.25  |  |
| Older Residential Structures                                   | 0.5                              | 0.3   |  |
| New Residential Structures                                     | 1                                | 0.5   |  |
| Modern Industrial/Commercial Buildings                         | 2                                | 0.5   |  |

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source of table data: California Department of Transportation, 2004.

Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible.

#### **Existing Ambient Noise Levels**

Existing daytime noise levels were measured at four locations within the vicinity of the project site on August 30, 2016. The existing noise levels were measured using a Larson Davis Model 820 sound level meter, which meets and exceeds the minimum industry performance requirements for "Type 1" standard instruments as defined in the American National Standards Institute (ANSI) S1.4. The sound level meter was programmed to measure using the "A" weighting scale and the "fast" detector response as recommended by the California Department of Transportation (Caltrans). The sound level meter was calibrated immediately prior to the first measurement to a sound level of 114 dB with a Larson Davis Precision Acoustic Calibrator Model CAL200. Each event occurred over a period of 10 minutes. The five measurement locations are described as follows:

- Location 1 western side of Woodley Avenue north of San Fernando Mission Boulevard. Noise levels were measured at the edge of the project site parking lot. The primary source of noise at this location was traffic on Woodley Avenue. Secondary sources of noise included traffic on the Ronald Reagan Freeway (SR-118), construction at a home along the eastern side of Woodley Avenue, and cars in the project site parking lot. A total of 76 vehicles passed by this location during the 10-minute measurement period. Noise levels at this location would also be representative of the residential properties along the eastern side of Woodley Avenue.
- Location 2 southern side of San Fernando Mission Boulevard east of Woodley Avenue. Noise levels were measured within the alley adjacent to the home at 16130 San Fernando Mission Boulevard. The primary source of noise at this location was traffic on San Fernando Mission Boulevard. Secondary sources of noise included cars in the adjacent market parking lot and leaves rustling in the wind. A total of 130 vehicles passed by this location during the 10-minute measurement period. Noise levels at this location would also be representative of the other residential properties along San Fernando Mission Boulevard east of Woodley Avenue.
- Location 3 western side of Woodley Avenue south of San Fernando Mission Boulevard. Noise levels were measured within the landscape area adjacent to the LADWP substation. The primary source of noise at this location was traffic on Woodley Avenue. Secondary sources of noise included traffic on SR-118 and people talking. A total of 150 vehicles passed by this location during the 10-minute measurement period. Noise levels at this location would also be representative of the residential properties along Woodley Avenue south of San Fernando Mission Boulevard.
- Location 4 southern side of San Fernando Mission Boulevard west of Woodley Avenue. Noise levels were measured within the alley adjacent to the home at 162200 San Fernando Mission Boulevard. The primary source of noise at this location was traffic on San Fernando Mission Boulevard. A total of 209 vehicles passed by this location during the 10-minute measurement period. Noise levels at this location

would also be representative of the other residential properties along southern side of San Fernando Mission Boulevard west of Woodley Avenue.

• Location 5 - western side of the proposed project site adjacent to the Bull Creek storm channel. The primary source of noise at this location was traffic on SR-118. Secondary sources of noise included activity at the batting cages at the site, cars own the project site parking lot, and dogs barking in the residential neighborhood to the west. Noise levels at this location would also be representative of the residential properties to the west of the Bull Creek storm channel.

The daytime noise levels measured at each of the locations are identified in Table 3.

TABLE 3 - EXISTING DAYTIME NOISE LEVELS

| Noise Measurement Location              | Duine and Maire Course               | Noise Level Statistics |      |      |  |
|---|--------------------------------------|------------------------|------|------|--|
| Noise Measurement Location              | Primary Noise Sources                | Leq                    | Lmax | Lmin |  |
| 1. Woodley Ave. north of SF Mission Bl. | Traffic on Woodley Avenue            | 63.5                   | 75.9 | 52.3 |  |
| 2. SF Mission Bl. east of Woodley Ave.  | Traffic on San Fernando Missions Bl. | 65.0                   | 84.2 | 55.2 |  |
| 3. Woodley Ave. south of SF Mission Bl. | Traffic on Woodley Avenue            | 67.0                   | 83.0 | 55.5 |  |
| 4. SF Mission Bl. west of Woodley Ave.  | Traffic on San Fernando Missions Bl. | 67.9                   | 77.5 | 60.7 |  |
| 5. western side of project site         | Traffic on SR-118                    | 63.7                   | 72.8 | 61.0 |  |

Noise level measurement results are provided in Appendix A.

#### THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G to the State CEQA Guidelines, a project could have a potentially significant impact associated with noise if any of the following were to occur:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies;
- (b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne 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 above levels existing without the project;
- (e) Exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such plan has not been adopted, within two miles of a public airport or public use airport; or

(f) Exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip.

#### **PROJECT IMPACTS**

#### Applicable Noise Standards

**Threshold**: Would the proposed project expose persons to or generate noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies.

**Impact**: The construction-related impact of the proposed project would be less than significant with the required compliance with the noise regulations under Section 41.40 of the Los Angeles Municipal Code (LAMC). Operation of the proposed project would not expose persons to or generate noise levels in excess of standards established by the City of Los Angeles and the operational impact of the proposed project would be less than significant.

#### Impact Analysis

#### **Construction-Related Impacts**

As discussed previously, construction is expected occur over a period of approximately 26 months with an anticipated start in the second quarter of 2017. Construction activities associated with the proposed project would require the use of heavy equipment for demolition and building construction. Noise from smaller power tools, generators, and other sources of noise would also be associated with construction of the proposed project. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the type and amount of equipment in operation and the location of the activity.

Section 41.40 of the LAMC regulates noise from demolition and construction activities. Specifically, Section 41.40 prohibits construction activity and repair work, where the use of any power tool, device, or equipment would disturb persons occupying sleeping quarters in any dwelling hotel, apartment, or other place of residence, between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, and between 6:00 p.m. and 8:00 a.m. on Saturday. All such activities are also prohibited on Sundays and all federal holidays.

Section 112.05 of the LAMC also specifies the maximum noise level of construction machinery that can be generated in any residential zone of the city or within 500 feet thereof. Specifically, any construction machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment may not generate a maximum noise level exceeding 75 dBA at a distance of 50 feet from the equipment. However, the above

noise limitation does not apply where compliance is technically infeasible (Section 112.05, LAMC). LAMC Section 112.05 defines technical infeasibility to mean that "said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment."

For the purpose of evaluating construction noise impacts, the City of Los Angeles L.A. CEQA Thresholds Guide (2006) defines sensitive uses as residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. As such, the sensitive receptors that would be affected by project construction activities would be the existing residences and high school facilities in the immediate vicinity of the project site. According to the L.A. CEQA Thresholds Guide, a significant impact would occur if construction activities lasting more than 10 days in a three month period would increase the ambient noise levels by 5 dBA or more at any off-site noise-sensitive location.

The Federal Highway Administration has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Table 4 for the types of equipment that are expected to be used at the project site based on industry standard practices and observations of other similar construction sites by Cadence staff.

The Federal Highway Administration has also compiled data regarding the noise generating characteristics of typical construction activities. These data, which represent composite construction noise, are presented in Table 5. As with noise generated by individual construction equipment, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance.

As shown in Table 5, daytime composite construction noise levels associated with the proposed project could range from 77 to 86 dBA  $L_{eq}$  at a distance of 50 from the construction activities. Similar noise levels would be expected to occur at the commercial use and school athletic fields adjacent to the project site. Noise levels at the nearest homes would be at least six dBA  $L_{eq}$  lower than these numbers since they are located more than 100 feet from the project site. Noise levels at the nearest classrooms at John F. Kennedy High School would be at least 12 dBA  $L_{eq}$  lower since they are located at least 200 feet from the project site. As shown previously in Table 3, existing ambient daytime noise levels average around 65 dBA  $L_{eq}$  along Woodley Avenue north of San Fernando Mission Boulevard, around 68 dBA  $L_{eq}$  along San Fernando Mission Boulevard west of Woodley Avenue, and 64 dBA  $L_{eq}$  in the western part of the project site. Construction activities associated with the proposed project would increase daytime noise levels at the nearby residential and school areas by more than 5 dBA.

| TABLE 4 - TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS |
|---|
|---|

| Equipment             | L <sub>max</sub> Noise Limit at 50 Feet |
|-----------------------|---|
|                       |   |
| Earthmo               |   |
| Backhoe               | 80                                      |
| Bulldozer             | 85                                      |
| Dump Truck            | 84                                      |
| Front End Loader      | 80                                      |
| Scraper               | 85                                      |
| Tractor               | 84                                      |
| Materials F           | Iandling                                |
| Concrete Mixer Truck  | 85                                      |
| Concrete Pump Truck   | 82                                      |
| Crane                 | 85                                      |
| Impact Eq             | uipment                                 |
| Compactor             | 80                                      |
| Jackhammer            | 85                                      |
| Pneumatic Tools       | 85                                      |
| Other Equ             | ipment                                  |
| Compressors           | 80                                      |
| Concrete Saws         | 90                                      |
| Gradall Forklift      | 85                                      |
| Pickup Truck          | 55                                      |
| Vacuum Street Sweeper | 80                                      |
| Welder/Torch          | 73                                      |
|                       |   |

Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.

Source of table data: Federal Highway Administration, 2006.

TABLE 5 - TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS

| Construction Phase                               | L <sub>eq</sub> Noise Levels at 50 Feet with Mufflers |
|--|---|
| Excavation/Grading                               | 86  |
| Foundations                                      | 77  |
| Structural                                       | 83  |
| Finishing  | 86  |
| Source of table data: City of Los Angeles, 2006. |   |

As noted above, compliance with the noise regulations under Section 41.40 of the LAMC, would reduce construction noise impacts to the maximum extent feasible. These regulations would not permit construction activities to occur during recognized sleep hours for nearby residences. Similar to other construction activities throughout Los Angeles, these regulations would ensure that construction-related noise impacts would be less than significant.

### **Operational Impacts**

Future noise levels at the project site would continue to be dominated by vehicular traffic on Woodley Avenue and San Fernando Mission Boulevard. As discussed previously, existing ambient daytime noise levels along Woodley Avenue adjacent to the site average approximately 64 dBA Leq while ambient daytime noise levels along San Fernando Mission Boulevard average approximately 68 dBA Leq. As a general rule 24-hour CNEL noise levels are within about 2 dBA of the peak traffic noise Leq under normal traffic conditions. This noise level would not exceed the city's 70.0 dBA CNEL exterior noise standard for new multi-family residential uses. As discussed previously, the exterior-to-interior reduction of newer residential buildings is generally more than 30 dBA. This is based on the situation in which new buildings must comply with California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires substantial building insulation and also reduces exterior to interior noise levels. Assuming a 30 dBA exterior to interior noise reduction for new residential buildings would provide an interior noise level of less than 45 dBA CNEL, which is the state's interior standard for new residential uses. In addition, the exterior courtyards of the proposed project would be shielded from roadway noise by the proposed buildings; thus providing a quiet exterior activity environment for project residents.

The City of Los Angeles has adopted a Noise Ordinance (Section 111 et seq. of the LAMC), which identifies noise standards for various sources, specific noise restrictions, exemptions, and variances for sources of noise within the city. The Noise Ordinance applies to all noise sources with the exception of any vehicle that is operated upon any public highway, street or right-of-way, or to the operation of any off-highway vehicle, to the extent that it is regulated in the State Vehicle Code, and all other sources of noise that are specifically exempted. The sources regulated by the City Noise Ordinance that would be applicable to the proposed project are as follows:

- Section 112.01 Radios, television sets, and similar devices.
- Section 112.02 Air conditioning, refrigeration, heating, pumping, and filtering equipment.
- Section 112.04 Powered equipment intended for repetitive use in residential areas and other machinery, equipment, and devices.
- Section 112.05 Maximum noise level of powered equipment or powered hand tools.
- Section 113.01 Rubbish and trash collection.

<sup>&</sup>lt;sup>1</sup> ICF Jones & Stokes, 2009.

- Section 114.02 Motor driven vehicles.
- Section 114.06 Vehicle theft alarm systems.
- Section 114.07 Audible status indicator (for vehicle theft alarms systems).
- Section 115.02 Prohibitions and regulations (for amplified sound).
- Section 114.01 Loud, unnecessary and unusual noise.

These regulations ensure that sources of noise at a property do not cause excessive noise levels at nearby residences.

Based on this information, operation of the proposed project would not expose persons to or generate noise levels in excess of standards established by the City of Los Angeles and the impact of the proposed project would be less than significant.

It should be noted that the football and athletics stadium for John. F. Kennedy High School is located to the immediate north of the project site and the visiting team bleachers are along the northern site boundary. Residents of the project site would be exposed to noise levels when activities occur at the stadium, particularly during football games. The loudspeakers for the visiting team bleachers are located on light standards and directed towards the bleachers and the project site. However, as a separate governmental agency, the Los Angeles Unified School District is not subject to the Noise Ordinance standards of the City of Los Angeles.

# **Ground-borne Vibration**

**Threshold**: Would the proposed project expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.

**Impact**: Construction and operation of the proposed project would not expose persons to or generate excessive ground-borne vibration. The impacts of the proposed project would be less than significant.

# Impact Analysis

# **Construction-Related Impacts**

Demolition and construction activities that would occur at the project site have the potential to generate low levels of ground-borne vibration. The buildings adjacent to the project site consist of newer residential and commercial structures of more modern wood, steel, and concrete construction. Based on the criteria identified previously in Table 2, a significant structural ground-borne vibration impact could occur if the adjacent residential buildings are exposed to vibration levels of 0.3 inches per second PPV. The potential for nearby residents to be annoyed by ground-borne vibration would be significant if vibration levels reach 0.10 inches per second PPV.

Table 6 identifies various vibration velocity levels for the types of construction equipment that would operate at the project site during construction. Based on the information presented in this table, vibration levels could reach as high as approximately 0.089 inches per second PPV within 25 feet of an operating large bulldozer. The maximum vibration level of 0.089 inches per second PPV would be below the thresholds of significance for both potential building damage and human annoyance. The nearest existing building to the proposed construction area is the Taco Bell restaurant at the northwestern corner of Woodley Avenue and San Fernando Mission Boulevard. This building would be exposed to a maximum vibration level of 0.089 inches per second PPV since it is about 25 feet from the project construction area. The nearest homes are located at least 110 feet from the project site and would be exposed to even lower vibration levels. Therefore, the potential impacts associated with construction vibration would be less than significant.

## **Operational Impacts**

The proposed project does not include uses that are expected to generate measurable levels of ground-borne vibration during operation of the proposed project. Therefore, the greatest regular source of project-related ground-borne vibration would be from trucks making deliveries to the project site and garbage trucks picking-up project-related refuse material. The vibration levels associated with these trucks would be less than the levels associated with large construction equipment. Therefore, the operational impacts associated with ground-borne vibration would be less than significant at nearby sensitive uses.

| TABLE 6 - VIBRATION LEVELS FOR TYPICAL CONSTRUCTION EQUIPMENT |                          |  |  |  |  |  |
|---|--------------------------|--|--|--|--|--|
| Equipment   | Reference PPV at 25 Feet |  |  |  |  |  |
| Large Bulldozer   | 0.089                    |  |  |  |  |  |
| Loaded Trucks   | 0.076                    |  |  |  |  |  |
| Jackhammer  | 0.035                    |  |  |  |  |  |
| Small Bulldozer   | 0.003                    |  |  |  |  |  |
| Source of table data: Jones & Stokes, 2004.                   |                          |  |  |  |  |  |

### **Permanent Increase in Ambient Noise Levels**

**Threshold**: Would the proposed project generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

**Impact**: Operation of the proposed project would not generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The impact of the proposed project would be less than significant.

# Impact Analysis

Based upon the criteria established in the City of Los Angeles L.A. CEQA Thresholds Guide (2006), the proposed project would have a significant operational noise impact if the proposed project would increase the ambient noise levels by 3 dBA CNEL at the property line of residential uses where the resulting noise level would be at least 70 dBA CNEL, or any 5 dBA or greater increase. As discussed previously, the existing ambient daytime noise levels at the existing residential uses in the vicinity of the project site are in the 64 to 68 dBA L<sub>eq</sub> range. Therefore, the 5 dBA threshold of significance would be applicable to the proposed project. The 5 dBA threshold of significance would also apply to the commercial uses located along Woodley Avenue and San Fernando Mission Boulevard.

Locations in the vicinity of the project site would experience a slight change in noise resulting from the reduced traffic generated by the proposed project and the increased activity at the project site. According to the Technical Traffic Evaluation prepared for the proposed project, the proposed project would generate approximately 6,246 vehicle trips per day with 328 trips occurring during the AM peak traffic hour and 577 trips during the PM peak traffic hour.<sup>2</sup> These numbers are less than the 8,249 daily trips, 377 AM peak hour trips, and 783 PM peak hour trips generated by the existing uses at the site.<sup>3</sup> However, there would be slight changes in the access patterns of vehicles entering and existing the site.

The changes in future peak hour noise levels along the roadway segments evaluated in the Technical Traffic Evaluation are identified in Table 7. As shown, the traffic generated by the proposed project would increase local noise levels by a maximum of 0.2 dBA L<sub>eq</sub> during the AM peak hour, which would be imperceptible to most people and would not exceed the applicable thresholds of significance for the affected existing land uses. During the PM peak hour, the roadway noise levels would be slightly lower than the existing noise levels. This would be a less than significant impact.

With regard to noise levels generated at the project site, the proposed project would result in the replacement of the existing commercial buildings, surface parking lots, and batting cages with new residential and commercial buildings with surface and subterranean parking. Noise levels associated with vehicle activity within the site would be similar to the existing conditions at the site. Noise levels associated with the residential buildings are largely restricted to indoor areas (unless a window is open) and the parking areas. As such, the operational noise levels at the project site would be similar to the existing noise levels at the site and the surrounding residential and commercial areas, and the operational noise impacts of the proposed project would be less than significant.

<sup>&</sup>lt;sup>2</sup> Overland Traffic Consultants, 2016.

<sup>&</sup>lt;sup>3</sup> Ibid.

TABLE 7 - PROJECT PEAK HOUR ROADWAY NOISE IMPACTS

| Roadway             | Roadway Segment     | Existing<br>Traffic<br>Volumes | Existing +<br>Project<br>Traffic | Increase in dBA $L_{eq}$ | Significance<br>Threshold | Significant<br>Impact? |
|---------------------|---------------------|--------------------------------|----------------------------------|--------------------------|---------------------------|------------------------|
|                     |                     | AM Pe                          | ak Traffic Hour                  |                          |                           |                        |
| San                 | west of Woodley     | 594                            | 603                              | 0.1                      | 5.0                       | No                     |
| Fernando<br>Mission | east of Woodley     | 649                            | 659                              | 0.1                      | 5.0                       | No                     |
| Woodley             | north of SF Mission | 580                            | 605                              | 0.2                      | 5.0                       | No                     |
| Avenue              | south of SF Mission | 719                            | 719                              | 0.0                      | 5.0                       | No                     |
|                     |                     | PM Pe                          | ak Traffic Hour                  |                          |                           |                        |
| San                 | west of Woodley     | 1,032                          | 1,020                            | -0.1                     | 5.0                       | No                     |
| Fernando<br>Mission | east of Woodley     | 1,033                          | 1,016                            | -0.1                     | 5.0                       | No                     |
| Woodley             | north of SF Mission | 776                            | 704                              | -0.4                     | 5.0                       | No                     |
| Avenue              | south of SF Mission | 1,015                          | 996                              | -0.1                     | 5.0                       | No                     |

For locations where the resulting noise level would exceed the 70 dBA "normally unacceptable" level for residential uses, the significance threshold established by the L.A. CEQA Thresholds Guide is a 3.0 dBA increase. For all other locations, the significance threshold is 5.0 dBA.

Calculation data and results are provided in Appendix B.

# **Temporary Increase in Ambient Noise Levels**

**Threshold**: Would the proposed project generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

**Impact**: Construction of the proposed project would generate a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Compliance with the noise regulations in Section 41.40 of the LAMC would reduced the impact to a less than significant level.

# **Impact Analysis**

As discussed previously, noise levels during demolition and construction of the proposed project may potentially reach as high as 80 dBA  $L_{\rm eq}$  at the nearest sensitive receptors. When these peak construction noise levels are compared against the existing ambient noise levels of approximately 65 dBA  $L_{\rm eq}$  along Woodley Avenue north of San Fernando Mission Boulevard, 68 dBA  $L_{\rm eq}$  along San Fernando Mission Boulevard west of Woodley Avenue, and 64 dBA  $L_{\rm eq}$  in the western part of the project site, an increase in daytime noise levels by more than 5 dBA would occur at the nearby sensitive uses due to their direct

proximity to the project site. As such, a substantial temporary or periodic increase in ambient noise levels would occur at these nearby sensitive uses during construction of the proposed project.

Although the proposed project would potentially generate high noise levels during the construction period as a result of heavy machinery and equipment use, compliance with the noise regulations under Section 41.40 of the LAMC would ensure that nearby sensitive receptors are not exposed to excessive noise levels during construction. Therefore, with compliance with the noise regulations in Section 41.40 of the LAMC, which would not permit construction activities to occur during recognized sleep hours for residences, construction noise impacts would be reduced to a less than significant level.

# **Public Airport Noise**

**Threshold**: Would the proposed project expose people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such plan has not been adopted, within two miles of a public airport or public use airport.

**Impact**: The proposed project would not expose people residing or working in the project area to excessive noise levels within an area covered by an airport land use plan. The impact of the proposed project would be less than significant.

# Impact Analysis

Although the project site is subject to occasional over flights from jet and propeller aircraft, it is not located within the noise impact area of a public airport land use plan or within two miles of a public use airport. No impact would occur.

# **Private Airstrip Noise**

**Threshold**: Would the proposed project expose people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip.

**Impact**: The proposed project would not expose people residing or working in the project area to excessive noise levels in the vicinity of a private airstrip. No impact would occur.

# Impact Analysis

The project site is not located within the vicinity of a private airstrip. No impact would occur.

# **CUMULATIVE IMPACTS**

Development of the proposed project in conjunction with other related projects would result in an increase in construction-related and traffic-related noise as well as on-site stationary noise sources in the

already urbanized Granada Hills area of the City of Los Angeles. The Technical Traffic Evaluation for the proposed project identifies three related projects within the vicinity of the proposed project site.<sup>4</sup> The nearest related project is located over one-half mile to the east at 15530 San Fernando Mission Boulevard.

# **Construction-Related Cumulative Impacts**

The project applicant has no control over the timing or sequencing of the related projects that have been identified within the proposed project study area. Therefore, any quantitative analysis that assumes multiple, concurrent construction projects would be entirely speculative. Construction-period noise and ground-borne vibration for the proposed project and each related project (that has not yet been built) would be localized. As discussed above, the nearest related project is located over one-half mile to the east at 15530 San Fernando Mission Boulevard. That project is located on the eastern side of the 405 Freeway and is far enough away that construction activities at that location would have no noise effect and no ground-borne vibration effect on the sensitive residential and commercial uses in close proximity to the proposed project site. Therefore, no cumulative construction-related noise impacts would occur in the immediate vicinity of the project site.

# **Operational Cumulative Noise Impacts**

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed project and related projects within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the difference between existing traffic volumes and future traffic volumes with the proposed project and cumulative development. The increases in roadway noise levels associated with cumulative development are identified in Table 8 for the roadway segments and peak hours where the proposed project would have a measurable increase in noise levels (reference Table 7). As shown, the traffic generated by the proposed project and cumulative development would increase local noise levels by a maximum of  $0.5 \text{ dBA L}_{eq}$ , which would be imperceptible to most people and would not exceed the City of Los Angeles thresholds of significance. Therefore, this cumulative impact would be less than significant.

As with the localized construction-related noise impacts, all of the other related projects are located far enough away that on-site equipment at those locations would have no noise effect on the sensitive residential uses in close proximity to the proposed project site. On-site equipment at the proposed project site would similarly have no noise effect on any sensitive uses in close proximity to the related project sites. Therefore, the proposed project would not contribute to cumulative noise impact associated with stationary and on-site operational noise sources.

<sup>&</sup>lt;sup>4</sup> Overland Traffic Consultants, 2016.

TABLE 8 - CUMULATIVE PROJECTS PEAK HOUR ROADWAY NOISE IMPACTS

| Roadway             | Roadway Segment      | Volumes Tra |                 | Increase<br>in dBA<br>L <sub>eq</sub> | Significance<br>Threshold | Significant<br>Impact? |  |
|---------------------|----------------------|-------------|-----------------|---------------------------------------|---------------------------|------------------------|--|
|                     | AM Peak Traffic Hour |             |                 |                                       |                           |                        |  |
| San                 | west of Woodley      | 594         | 666             | 0.5                                   | 5.0                       | No                     |  |
| Fernando<br>Mission | east of Woodley      | 649         | 733             | 0.5                                   | 5.0                       | No                     |  |
| Woodley             | north of SF Mission  | 580         | 643             | 0.4                                   | 5.0                       | No                     |  |
| Avenue              | south of SF Mission  | 719         | 766             | 0.3                                   | 5.0                       | No                     |  |
|                     |                      | PM Pe       | ak Traffic Hour |                                       |                           |                        |  |
| San                 | west of Woodley      | 1,032       | 1,157           | 0.5                                   | 5.0                       | No                     |  |
| Fernando<br>Mission | east of Woodley      | 1,033       | 1,162           | 0.5                                   | 5.0                       | No                     |  |
| Woodley             | north of SF Mission  | 776         | 755             | -0.1                                  | 5.0                       | No                     |  |
| Avenue              | south of SF Mission  | 1,015       | 1,062           | 0.2                                   | 5.0                       | No                     |  |

For locations where the resulting noise level would exceed the 70 dBA "normally unacceptable" level for residential uses, the significance threshold established by the L.A. CEQA Thresholds Guide is a 3.0 dBA increase. For all other locations, the significance threshold is 5.0 dBA.

Calculation data and results are provided in Appendix B.

# **REFERENCES**

California Natural Resources Agency. 2016. 2016 California Environmental Quality Act (CEQA) Statute and Guidelines. Association of Environmental Professionals.

ICF Jones & Stokes. November 2009. *Technical Noise Supplement*. Sacramento, California: California Department of Transportation, Division of Environmental Analysis.

Jones & Stokes. June 2004. *Transportation- and Construction-Induced Vibration Guidance Manual*. Sacramento, California: California Department of Transportation, Noise Vibration, and Hazardous Waste Management Office.

Los Angeles, City of. 2006. L.A. CEQA Thresholds Guide.

Los Angeles, City of. February 3, 1999. Noise Element of the City of Los Angeles General Plan.

Overland Traffic Consultants, Inc. July 19, 2016. Technical Traffic Evaluation for the Proposed Mixed-Use Project at 11147 Woodley Avenue & 16201-16301 San Fernando Missions Boulevard. U.S. Department of Transportation, Federal Highway Administration. 2006. FHWA Roadway Construction Noise Manual User's Guide. Report No. FHWA-HEP-05-054. Cambridge, Massachusetts: John Volpe National Transportation Systems Center, Acoustics Facility.

# APPENDIX A NOISE LEVEL MEASUREMENT DATA

# C:\LARDAV\SLMUTIL\10AUG\_16.bin Interval Data

| Site | Location             | Numbe | r | Date  |    | Time     | Duration | Leq           | Lmax          | Lmin |
|------|----------------------|-------|---|-------|----|----------|----------|---------------|---------------|------|
| 1    | Woodley north of SFM |       | 1 | 30Aug | 16 | 13:10:22 | 600.0    | 63 <b>.</b> 5 | 75 <b>.</b> 9 | 52.3 |
| 2    | SFM east of Woodley  |       | 2 | 30Aug | 16 | 13:27:13 | 600.0    | 65.0          | 84.2          | 55.2 |
| 3    | Woodley south of SFM |       | 3 | 30Aug | 16 | 13:43:04 | 600.0    | 67.0          | 83.0          | 55.5 |
| 4    | SFM west of Woodley  |       | 4 | 30Aug | 16 | 13:57:07 | 600.0    | 67.9          | 77.5          | 60.7 |
| 5    | west side of project | site  | 5 | 30Aug | 16 | 14:12:33 | 600.0    | 63.7          | 72.8          | 61.0 |

# APPENDIX B - NOISE LEVEL CALCULATION DATA

# Roadway and Highway Traffic Noise Levels



Project Name: Woodley & San Fernando Mission

### **Background Information**

Model Description: Caltrans Technical Noise Supplement (November 2009)

methodologies. Analysis Scenarios:

Existing and Future Traffic Volumes.

Source of Traffic Volumes: Overland Traffic Consultants, Inc., July 19, 2016.

### Existing + Project Peak Traffic Volumes

| Analysis Location                     | Land Use    | Existing AM<br>Peak Traffic<br>Volume | Existing +<br>Project AM<br>Peak | AM Peak Hour<br>Increase dBA<br>Leq | Existing PM<br>Peak Traffic<br>Volume | Existing +<br>Project PM<br>Peak | AM Peak Hour<br>Increase dBA<br>Leq |
|---------------------------------------|-------------|---------------------------------------|----------------------------------|-------------------------------------|---------------------------------------|----------------------------------|-------------------------------------|
| San Fernando Mission west of Woodley  | Residential | 594                                   | 603                              | 0.1                                 | 1,032                                 | 1,020                            | -0.1                                |
| San Fernando Mission east of Woodley  | Residential | 649                                   | 659                              | 0.1                                 | 1,033                                 | 1,016                            | -0.1                                |
| Woodley north of San Fernando Mission | Residential | 580                                   | 605                              | 0.2                                 | 776                                   | 704                              | -0.4                                |
| Woodley south of San Fernando Mission | Residential | 719                                   | 719                              | 0.0                                 | 1,015                                 | 996                              | -0.1                                |

Existing + Cumulative Projects Peak Traffic Volumes

| Analysis Location                     | Land Use    | Existing AM<br>Peak Traffic<br>Volume | Future +<br>Project AM<br>Peak | AM Peak Hour<br>Increase dBA<br>Leq | Existing PM<br>Peak Traffic<br>Volume | Future + Project<br>PM Peak | AM Peak Hour<br>Increase dBA<br>L <sub>eq</sub> |
|---------------------------------------|-------------|---------------------------------------|--------------------------------|-------------------------------------|---------------------------------------|-----------------------------|---|
| San Fernando Mission west of Woodley  | Residential | 594                                   | 666                            | 0.5                                 | 1,032                                 | 1,157                       | 0.5   |
| San Fernando Mission east of Woodley  | Residential | 649                                   | 733                            | 0.5                                 | 1,033                                 | 1,162                       | 0.5   |
| Woodley north of San Fernando Mission | Residential | 580                                   | 643                            | 0.4                                 | 776                                   | 755                         | -0.1  |
| Woodley south of San Fernando Mission | Residential | 719                                   | 766                            | 0.3                                 | 1,015                                 | 1,062                       | 0.2   |

# **APPENDIX H**

# LADOT RESPONSE MEMO TO THE TRAFFIC EVALUATION

# **TECHNICAL TRAFFIC EVALUATION**

# CITY OF LOS ANGELES

### INTER-DEPARTMENTAL MEMORANDUM

16201 San Fernando Mission Blvd. DOT Case No. DIR-2016-3076

Date: N

November 3, 2016

To:

Heather Bleemers, City Planner

Department of City Planning

From:

Sergio D. Valdez, Transportation Engineer

Department of Transportation

Subject:

TRAFFIC EVALUATION FOR PROPOSED MIXED USE PROJECT AT 16201 SAN

FERNANDO MISSION BLVD.

DIR-2016-3076-DRB-SPP-DB-SPR, ENV-2016-3077-EAF, VTT-74392

The Department of Transportation (DOT) has completed the review of a technical traffic letter submitted July 2016 by Overland Traffic Consultants, Inc. with an analysis of a proposed mixed use project consisting of 440 apartment units and 64,845 square feet of retail uses replacing an existing 75,391 square-foot shopping center. The forecasted difference to vehicular traffic on adjacent streets on a typical weekday is 633 fewer vehicle trips overall, 3 additional trips during the AM peak hour and 74 fewer trips during the PM peak hour, which constitutes a less-than-significant impact to regional transportation.

# ACCESS AND CIRCULATION

Project driveway access and on-site circulation between parking areas shall conform to Section 321 of DOT Manual of Policies and Procedures. To avoid delays and untimely revisions, submit a site access and circulation plan to DOT Developer Services at 6262 Van Nuys Blvd., Suite 320 before building layouts are finalized, with due regard to the following comments:

- The parking and driveway plan should show the adjacent public right of way and any existing curb cut, ramp, fixed object or substructure within 25 feet of a project driveway.
- Driveways should conform to Standard Plan S-440-4. The approach apron width "W", which
  excludes side slopes, should be 30 feet for two-way access at <u>all</u> project driveways. The
  northerly driveway on Woodley Avenue does not meet this standard as currently proposed.
- If turn restrictions are required, signs in the public way shall be posted prior to occupancy.

### DOT CLEARANCE GUIDELINES

DOT clearance actions associated with building, engineering or use permits or final map recordation normally entail receipt of an acceptable project access and internal circulation plan and payment of applicable fees pursuant to LAMC §19.15. If you have any questions, you may contact me or Ken Aitchison of my staff at 818-374-4692.



Overland Traffic Consultants 952 Manhattan Beach Bl. #100 Manhattan Beach, CA 90266 Phone (310) 545-1235 E-mail: liz@overlandtraffic.com

July 19, 2016

Mr. Sergio Valdez Mr. Ken Aitchison Los Angeles Dept. of Transportation Valley Development Review 6262 Van Nuys Boulevard #320 Van Nuys, CA 91401

RE: Technical Traffic Evaluation for the Proposed Mixed-Use Project at 11147 Woodley Avenue & 16201-16301 San Fernando Mission Boulevard

Dear Mr. Valdez & Mr. Aitchison,

Overland Traffic Consultants has conducted a technical traffic evaluation for the proposed 40-unit residential apartment, 16,245 square feet of retail and 46,800 square feet grocery store development Project located at 11147 Woodley Avenue & 16201-16301 San Fernando Mission Boulevard in the City of Los Angeles. The proposed Project will replace an existing 75,391 square foot commercial center including a Department of Motor Vehicles (DMV) office, medical office, restaurants, retail and a religious service location. A determination of the trip generation has been conducted based upon national standards, evaluation of potential traffic the adjacent intersection of San Fernando Mission Boulevard and Woodley Avenue. This is the intersection most likely to be impacted by the project. An evaluation of the trip generation, access & circulation indicates the following:

- Project Trip Generation: 2,002 fewer daily trips with 24 AM Peak Hour and 22 PM Peak Hour trips;
- San Fernando Mission Boulevard and Woodley Avenue no significant traffic impact;
- Vehicular access with two driveways off of San Fernando Mission Boulevard and two driveways off of Woodley Avenue, no significant traffic impact;

No significant traffic impacts are anticipated with this project. The details of this focused analysis are provided below and on the following pages.

# **Project Description & Generation**

The Project site is northwest of the intersection of San Fernando Mission Boulevard and Woodley Avenue with frontage along both streets but does not include the corner property. The existing 75,391 square foot commercial center includes a 35,000 square foot DMV office, 6,200 square feet of medical office, 12,410 square feet of restaurants



(10,000 square foot Chuck E Cheese, 1,050 square foot Golden Wall Chinese, and 1,360 square foot House of Grill), a 1,250 square feet of fast food restaurant without drive through (Mighty Mouth Burgers), 19,257 square feet of retail and 1,274 square feet of used for religious services. The existing commercial center has two driveways on San Fernando Mission Boulevard and two driveways on Woodley Avenue.

The proposed Project will construct 440 apartment units (264 one-bedroom units and 176 two-bedroom units), 16,245 square feet of retail and a 46,800 square foot grocery store. The retail areas will be located along the Woodley Avenue street frontage. The grocery store will be located along the San Fernando Mission Boulevard frontage. The housing will be located with two levels over the retail along Woodley Avenue, three levels over the grocery store and four levels over the parking garage at the northwest corner of the property. Vehicular access is proposed from two driveways on San Fernando Mission Boulevard and two driveways on Woodley Avenue. One driveway on Woodley Avenue and one driveway on San Fernando Mission Boulevard will be located at the far west (San Fernando Mission Boulevard) and far the north (Woodley Avenue) end of the site to reduce conflicts with the San Fernando Mission Boulevard and Woodley Avenue intersection. Two loading bays will be provided along the western side of the grocery store building with a turnaround area provided for the trucks. Vehicle and bicycle parking will be provided to meet or exceed City of Los Angeles Municipal Code requirements. The Project site does not include the corner property that has an existing fast-food restaurant (Taco Bell) located on it.

The Project site plan is provided in Attachment A. The location of the project is displayed on the map and aerial view in Figure 1 and 2.

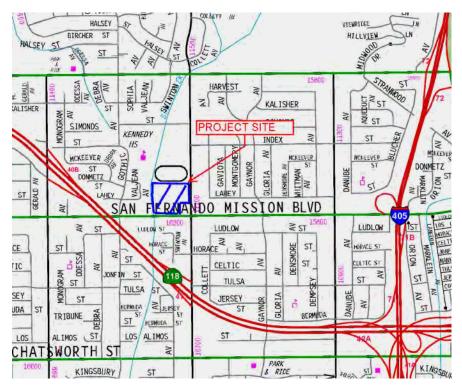


Figure 1: Project Location Area Map



Figure 2: Aerial of Project Site Area

Project trip generation has been based upon industry standards of the Institute of Transportation Engineers (ITE) Trip Generation Manual 9<sup>th</sup> Edition for the proposed apartments, grocery and retail Project and existing DMV office, medical office, restaurants, fast food without drive through and religious use. The trip generation rates are shown below in Table 1.

Table 1
Project Trip Generation Rates

|  | ITE         | Daily          | AM    | Peak H    | our        | PM Peak Hour |           |            |
|--|-------------|----------------|-------|-----------|------------|--------------|-----------|------------|
| <u>Description</u>                     | <u>Code</u> | <u>Traffic</u> | Total | <u>In</u> | <u>Out</u> | Total        | <u>In</u> | <u>Out</u> |
| Apartment                              | 220         | 6.65           | 0.51  | 20%       | 80%        | 0.62         | 65%       | 35%        |
| Church                                 | 560         | 9.11           | 0.56  | 62%       | 38%        | 0.55         | 48%       | 52%        |
| Medical Office                         | 720         | 36.13          | 2.39  | 79%       | 21%        | 3.57         | 28%       | 72%        |
| State Motor Vehicles Dept <sup>1</sup> | 731         | 166.02         | 9.84  | 52%       | 48%        | 17.09        | 51%       | 49%        |
| Shopping Center (rates)                | 820         | 42.70          | 0.96  | 62%       | 38%        | 3.71         | 48%       | 52%        |
| Grocery Store                          | 850         | 102.24         | 3.40  | 62%       | 38%        | 9.48         | 51%       | 49%        |
| Quality Restaurant                     | 931         | 89.95          | 0.81  | 55%       | 45%        | 7.49         | 67%       | 33%        |
| High Turnover Restaurant <sup>2</sup>  | 932         | 127.16         | 10.81 | 55%       | 45%        | 9.85         | 60%       | 40%        |
| Fast Food Without Drive Thur           | 933         | 496.12         | 43.87 | 60%       | 40%        | 26.15        | 51%       | 49%        |

Rate are per unit for apartment and all other per 1,000 square feet

The ITE trip generation does not take into account the surrounding community amenities interaction between the venues and proximity to major roadways. The proposed Project will provide both residential and retail components. It is likely that many of the site residents will make use of the retail provided in the Project. A conservative 5% internal trip reduction was incorporated into the analysis for the retail and grocery store components. The Project is along San Fernando Mission Boulevard and Woodley Avenue which carry traffic across the San Fernando Valley. It is likely that some of the patrons for the existing restaurants and retail and some of the future patrons of the retail and grocery store stop into the site on their way to or from another major destination point. Therefore, as permitted by LADOT 10% pass-by rate was incorporated into the proposed retail and 40% pass-by rate for the proposed grocery store. A 10% pass-by rate for the existing medical offices and restaurant, 40% pass-by rate for the existing retail and 50% pass-by rate for the existing fast food restaurant for the existing retail was incorporated into the analysis. These pass-by rates are typically not incorporated into the

<sup>1 -</sup> No in and out % rates available, used US Post Office as similar

<sup>2-</sup> no morning service.

<sup>3-</sup> no morning service, daily rate based on 1 observation, used lower FF with Drive Thru for credits

analysis of the adjacent intersection since turning movements may be required to access the site. The Project trip generation after credit for existing uses, internal and pass-by reductions is provided in Table 2.

Table 2
Project Trip Generation

|  |                      |          | Daily                              | Daily AM Peak Hour PM Peak Ho |                                   |                                   |                                  | our                           |                               |
|--|----------------------|----------|------------------------------------|-------------------------------|-----------------------------------|-----------------------------------|----------------------------------|-------------------------------|-------------------------------|
| <u>Description</u>   | <u>Size</u>          |          | <u>Traffic</u>                     | <u>Total</u>                  | <u>In</u>                         | <u>Out</u>                        | <u>Total</u>                     | <u>In</u>                     | Out                           |
| PROPOSED   |                      |          |                                    |                               |                                   | -                                 |                                  |                               | -                             |
| Apartment  | 440                  | units    | 2926                               | 224                           | 45                                | 179                               | 273                              | 177                           | 96                            |
| Retail Internal Trips<br>Pass-By<br>Subtotal Retail                                  | 16,245<br>5%<br>10%  | sf       | 694<br>(35)<br>(66)<br>593         | 16<br>(1)<br><u>(2)</u><br>13 | 10<br>(1)<br><u>(1)</u><br>8      | 6<br>(0)<br><u>(1)</u><br>5       | 60<br>(3)<br><u>(6)</u><br>51    | 26<br>(1)<br>(3)<br>22        | 34<br>(2)<br>(3)<br>29        |
| Grocery Store<br>Internal Trips<br>Pass-By<br>Subtotal Grocery                       | 46,800<br>5%<br>40%  | sf       | 4,785<br>(239)<br>(1,818)<br>2,727 | 159<br>(8)<br>(60)<br>91      | 99<br>(5)<br>(38)<br>56           | 60<br>(3)<br>(22)<br>35           | 444<br>(22)<br>(169)<br>253      | 226<br>(11)<br>(86)<br>129    | 218<br>(11)<br>(83)<br>124    |
| SUBTOTAL Proposed  |                      |          | 6,246                              | 328                           | 109                               | 219                               | 577                              | 328                           | 249                           |
| REMOVAL OF EXISTING  |                      |          |                                    |                               |                                   |                                   |                                  |                               |                               |
| DMV Office   | 35,000               | sf       | 5,811                              | 344                           | 179                               | 165                               | 598                              | 305                           | 293                           |
| Medical Office Pass-By Subtotal Medical Office                                       | 6,200<br>10%         | sf       | 224<br>(22)<br>202                 | 15<br><u>(1)</u><br>14        | 12<br>(1)<br>11                   | 3<br>(0)<br>3                     | 22<br>(2)<br>20                  | 6<br>(1)<br>5                 | 16<br><u>(1)</u><br>15        |
| Restaurants <sup>1</sup> Internal Trips Pass-By Subtotal Restaurant                  | 12,410<br>10%<br>10% | sf       | 1,578<br>(158)<br>(142)<br>1,278   | 10<br>(1)<br><u>(1)</u><br>8  | 6<br>(1)<br>(1)<br>4              | 4<br>0<br>(0)<br>4                | 122<br>(12)<br><u>(11)</u><br>99 | 73<br>(7)<br><u>(7)</u><br>59 | 49<br>(5)<br><u>(4)</u><br>40 |
| Fast Food Without Drive Thru <sup>2</sup> Internal Trips Pass-By Subtotal Restaurant | 1,250<br>10%<br>50%  | sf       | 620<br>(62)<br>( <u>56)</u><br>502 | 1<br>(0)<br><u>(0)</u><br>1   | 1<br>(0)<br>(0)<br>1              | 0<br>0<br>( <u>0)</u><br>0        | 33<br>(3)<br>(3)<br>27           | 17<br>(2)<br>(1)<br>14        | 16<br>(1)<br><u>(2)</u><br>13 |
| Retail Internal Trips Pass-By Subtotal Retail Religious                              | 19,257<br>10%<br>40% | sf<br>sf | 822<br>(82)<br>(296)<br>444<br>12  | 18<br>(2)<br><u>(7)</u><br>9  | 11<br>(1)<br><u>(4)</u><br>6<br>0 | 7<br>(1)<br>( <u>3)</u><br>3<br>1 | 71<br>(7)<br>( <u>26)</u><br>39  | 34<br>(3)<br>(12)<br>19<br>0  | 37<br>(4)<br>(13)<br>20<br>1  |
|  | •                    |          |                                    |                               | -                                 | •                                 |                                  |                               | -                             |
| SUBTOTAL Existing  | 75,391               | sf       | 8,249                              | 377                           | 201                               | 176                               | 783                              | 401                           | 382                           |
| NET Project  |                      |          | (2,003)                            | (49)                          | (92)                              | 43                                | (206)                            | (73)                          | (133)                         |

<sup>1 -</sup> Not open for breakfast, includes 10,000 sf Chuck E Cheese, 1,050 sf golden Wall Chinese, and 1,360 sf House of GrillUsed High turnover rates for daily and PM, used Quality for AM

<sup>2-</sup> Mighty Mouth Burgers - no am service, used quality restaurant rates for am

| without pass-by or internal reductions | (438) | 25 | (43) | 67 | (48) | 0   | (48) |
|--|-------|----|------|----|------|-----|------|
| without pass by                        | (633) | 3  | (59) | 62 | (74) | (6) | (68) |

There is are fewer trips generated daily, during the AM Peak Hour and during the PM Peak Hour than is generated by the current commercial center. However, the direction of the AM Peak Hour trips shifts somewhat because the housing element of the project will have more drivers leaving during the AM Peak Hour whereas the current commercial center has more drivers arriving.

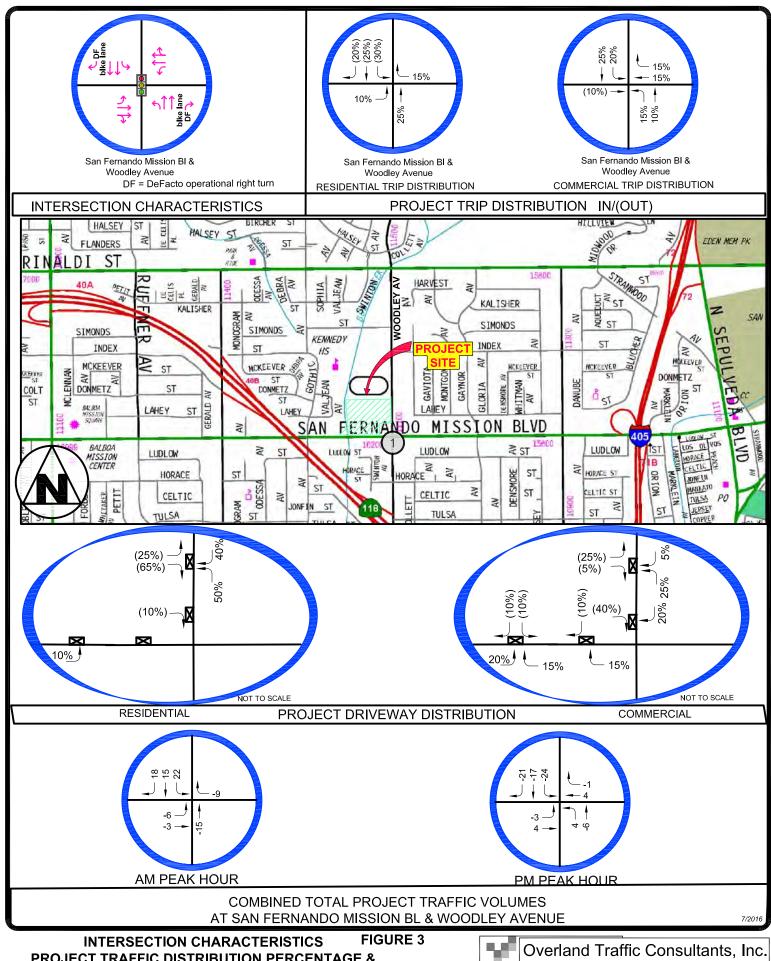
This level of trip generation indicates a need for a focused traffic analysis of nearby potentially impacted intersection according the Los Angeles Department of Transportation (LADOT) Traffic Study Guidelines, dated August 2014. The focused intersection analysis is provided in the following sections.

The project trips were distributed to the adjacent study intersection of San Fernando Mission Boulevard and Woodley Avenue. All four of the Project driveways can be used for ingress or egress to the all of the Project components. The majority of the residential trips are likely to use the driveway at the north end of the Project site off of Woodley Avenue because this one leads right in to their garage access point. A separate distribution was developed for the residential and commercial components of the Project in order to capture this activity. The existing commercial center has all four driveways available for all the uses on the site. In determining the net residential and commercial trips, the existing trips were split evenly. Table 3 displays the net residential and net commercial trips without pass-by reductions.

Table 3
Net Residential and Commercial Project Trips

|  | Daily                | AM Peak Hour |                    |                   | PM Peak Hour       |                   |                    |
|--|----------------------|--------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|  | <u>Traffic</u>       | Total        | <u>In</u>          | <u>Out</u>        | Total              | <u>In</u>         | Out                |
| residential wo pass-by credit commercial wo pass-by credit | (1456)<br><u>823</u> | 30<br>(27)   | (59)<br><u>(0)</u> | 89<br><u>(27)</u> | (140)<br><u>66</u> | (34)<br><u>28</u> | (106)<br><u>38</u> |
| combined without pass by                                   | (633)                | 3            | (59)               | 62                | (74)               | (6)               | (68)               |

Figure 3 shows the current study intersection characteristics, project trip distribution, estimated Project driveway distribution and Project trips at the study intersections.



PROJECT TRAFFIC DISTRIBUTION PERCENTAGE & PROJECT ONLY VOLUMES (AM PEAK/PM PEAK)

952 Manhattan Beach Bl. #100, Manhattan Beach, CA 90266 (661)312-2694, liz@overlandtraffic.com

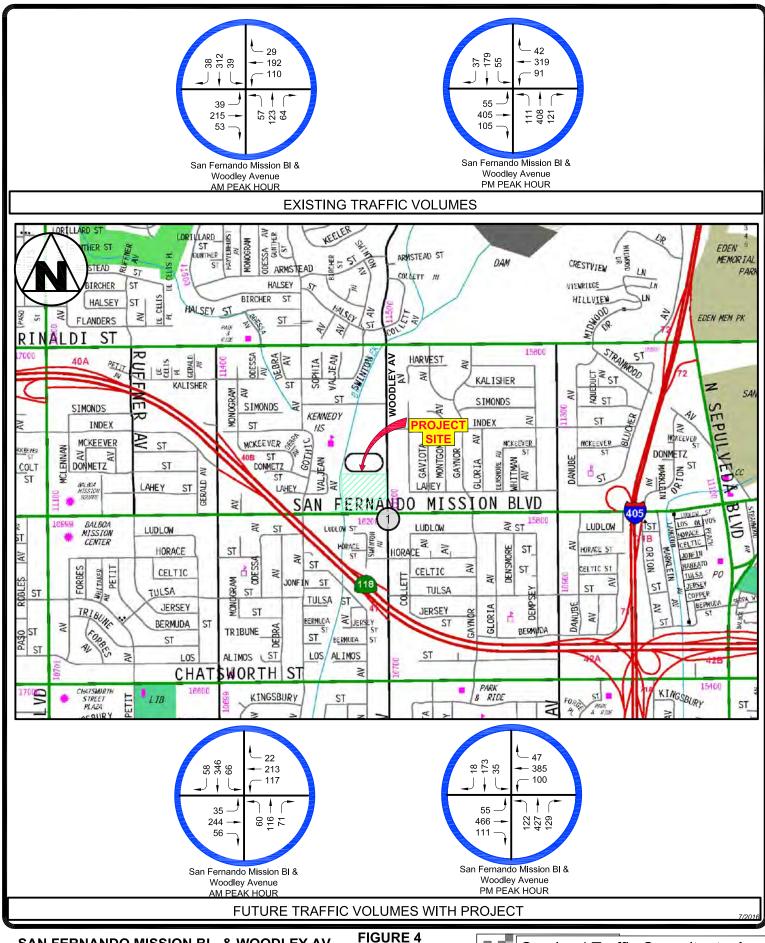
# Operating Conditions at Intersections in the Area

A discussion with LADOT was conducted to detail the focused analysis parameters and details. As per the discussion, traffic counts were conducted during the morning and afternoon peak hours a typical school day with no holidays or inclement weather. Morning peak counts from 7 to 10 AM and evening peak counts from 3 to 6 PM were conducted at San Fernando Mission Boulevard and Woodley Avenue. This is the adjacent signalized intersection and the most likely to be significantly impacted by the Project related traffic. An aerial view of the study intersection is provided in Attachment B.

The traffic analysis at the signalized intersection was conducted using the Critical Movement Analysis (CMA) process as required by LADOT. The existing intersection lane configurations and traffic controls were used to determine the existing, existing + project, future without project and future with project traffic conditions. The existing traffic volumes are provided on Figure 4. Attachment C provides the count data.

The CMA procedure uses a ratio of the intersection's full traffic volume to its capacity for rating an intersection's congestion level. The highest combinations of conflicting traffic volume (V) at an intersection are divided by the intersection capacity value. Intersection capacity (C) represents the maximum volume of vehicles which has a reasonable expectation of passing through an intersection in one hour under typical traffic flow conditions.

Once the volume-to-capacity ratio has been calculated, operating characteristics are assigned a level of service grade (A through F) to estimate the level of congestion and stability of the traffic flow. The term "Level of Service" (LOS) is used to describe the quality of traffic flow. Definitions of the LOS grades are shown in Table 4.



SAN FERNANDO MISSION BL. & WOODLEY AV. EXISTING (2016) TRAFFIC VOLUMES & FUTURE (2019) TRAFFIC VOLUMES WITH PROJECT



Overland Traffic Consultants, Inc.

952 Manhattan Beach Bl. #100, Manhattan Beach, CA 90266 (661)312-2694, liz@overlandtraffic.com

Table 4
V/C Level of Service Definitions – Signalized Intersections

| Level of Service | <u>Definition</u>  | Equivalent V/C |
|------------------|--|----------------|
| Α                | EXCELLENT - Free flow conditions with low traffic density.   | 0.000 - 0.600  |
| В                | <u>VERY GOOD</u> - A stable flow of traffic.   | 0.601 - 0.700  |
| С                | GOOD - Light congestion but stable, occasional backups behind left-turning vehicles.   | 0.701 - 0.800  |
| D                | <u>FAIR</u> Approaching instability, drivers are restricted in freely changing lanes. Vehicles may be required to wait through more than one cycle.                                      | 0.801 - 0.900  |
| E                | <u>POOR</u> - At or near capacity with some long lines for left-turning vehicles. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. | 0.901 - 1.000  |
| F                | <u>FAILURE</u> - Jammed conditions with stoppages of long duration and long queues.  | > 1.000        |

Significant traffic impacts are identified by LADOT as indicated in Table 5 below.

Table 5
City of Los Angeles Significant Traffic Impact Criteria

| <u>LOS</u> | Final V/C Value | Increase in V/C Value |
|------------|-----------------|-----------------------|
| С          | 0.701 - 0.800   | + 0.040               |
| D          | 0.801 - 0.900   | + 0.020               |
| E&F        | > 0.901         | + 0.010 or more       |

No significant impacts occur at LOS A or B because intersections operations are good and can accommodate additional traffic growth.

The existing traffic was evaluated with new traffic volume counts collected for this analysis. The Existing + Project traffic was determined by adding the project traffic as shown in Figure 3 to the existing traffic volumes. A summary of this analysis is provided in Table 6 on the following page.



Table 6
Existing and Existing + Project Summary Operating Conditions

|                         |             |            |            | Existing   |          |               |               |
|-------------------------|-------------|------------|------------|------------|----------|---------------|---------------|
|                         | Peak        | Exist      | ting       |            | +Project |               | Significant   |
| Intersection            | <u>Hour</u> | <u>CMA</u> | <u>LOS</u> | <u>CMA</u> | LOS      | <u>Impact</u> | <u>Impact</u> |
| San Fernando Mission Bl | AM          | 0.205      | Α          | 0.209      | Α        | + 0.004       | NO            |
| Woodley Av              | PM          | 0.303      | Α          | 0.287      | Α        | -0.016        | NO            |

No significant traffic impacts have been identified. The negative impact during the PM Peak Hour is created by the reduction of vehicle trips in the critical moves at the intersection during this time period. The presents better traffic in the future with the Project than currently exists. The CMA evaluation worksheets are provided in Attachment E.

Future Without Project traffic volumes were determined by adding ambient growth of 1% per year as required by LADOT in traffic studies for this area and traffic volumes from other planned development in the area to the existing counts. The Future With Project conditions were determined by adding the Project traffic volumes to the Future Without Project volumes. Appendix D provides detail information for the related including the address, type of project and trip generation of related projects. A graphic displaying the location of the related projects is provided in Appendix D.

Table 7 displays the results of the Future without Project and With Project analysis.

Table 7
Future Conditions Without and With Project Operating Conditions

|                         |             | Future (2019)   |     | Future (2019) |     |               |               |
|-------------------------|-------------|-----------------|-----|---------------|-----|---------------|---------------|
|                         | Peak        | Without Project |     | With Project  |     |               | Significant   |
| <u>Intersection</u>     | <u>Hour</u> | <u>CMA</u>      | LOS | CMA           | LOS | <u>IMPACT</u> | <u>Impact</u> |
| San Fernando Mission Bl | AM          | 0.230           | Α   | 0.233         | Α   | + 0.003       | NO            |
| Woodley Av              | PM          | 0.342           | Α   | 0.325         | Α   | -0.017        | NO            |

No significant traffic impacts have been identified. The negative impact during the PM

Peak Hour is created by the reduction of vehicle trips in the critical moves at the intersection during this time period. The presents better traffic in the future with the Project than currently exists. The CMA evaluation worksheets are provided in Attachment E. The future with project traffic volumes are provided in Figure 4 on page 9.

# Access & Circulation

Parking for the new development will be provided on surface lots behind the retail and the parking garage and between the market and the existing fast food restaurant on the corner that is not a part of the Project. Garage parking will be provided on the northwest corner of the site with the commercial and residential parking areas separated. Two loading bays will be provided along the west side of the grocery store. The site will be accessed from two driveways off of San Fernando Mission Boulevard and two driveways off of Woodley Avenue.

Along the Project frontage, the striping on San Fernando Mission Boulevard provides two lanes in each direction with an eastbound to northbound left turn pocket at Woodley Avenue that transitions to a two-way left turn lane westerly. An aerial view of the Project's San Fernando Mission Boulevard is below in Figure 5.



Figure 5: San Fernando Mission Bl. along Project Frontage

Along the Project frontage, the striping on Woodley Avenue provides two vehicle lanes and one bike lane in each direction with a southbound to eastbound left turn pocket at San Fernando Mission Boulevard that transitions to a two-way left turn lane northerly. An aerial view of the Project's Woodley Avenue frontage is provided in Figure 6.



Figure 6: Woodley Avenue along Project Frontage



The Project driveways on San Fernando Mission Boulevard and Woodley Avenue that are closest to the intersection are proposed with right turn in and out only. The driveway on Woodley Avenue at the north end of the site, and the driveway on San Fernando Mission Boulevard at the west end of the site are proposed as full access driveways with right and left turns in and out of the site. These movements are facilitated by the current two-way left turns that can be restriped with left turn pockets or left in their current configurations.

# **Summary & Conclusions**

- The proposed 440-unit apartment, 16,245 square foot retail and 46,800 square foot grocery store Project to replace the existing 95,391 square foot commercial center with DMV office, medical offices, restaurants, retail and a small religious use will not create any significant traffic impacts. The adjacent study intersection of San Fernando Mission Boulevard and Woodley Avenue would continue to experience the same LOS without or with the project. No LADOT impact thresholds are exceeded.
- The immediate surrounding roadways may experience a minor increase in directional traffic but overall lower traffic volumes as a result of the project. The Project trips through the adjacent intersection studied during the peak periods decreases the volumes through the intersection. The LOS does not change nor does the change in traffic volume create any significant traffic impacts. The project is not expected to alter traffic in a substantive amount in relation to the surrounding roadway network to create any significant traffic impacts.

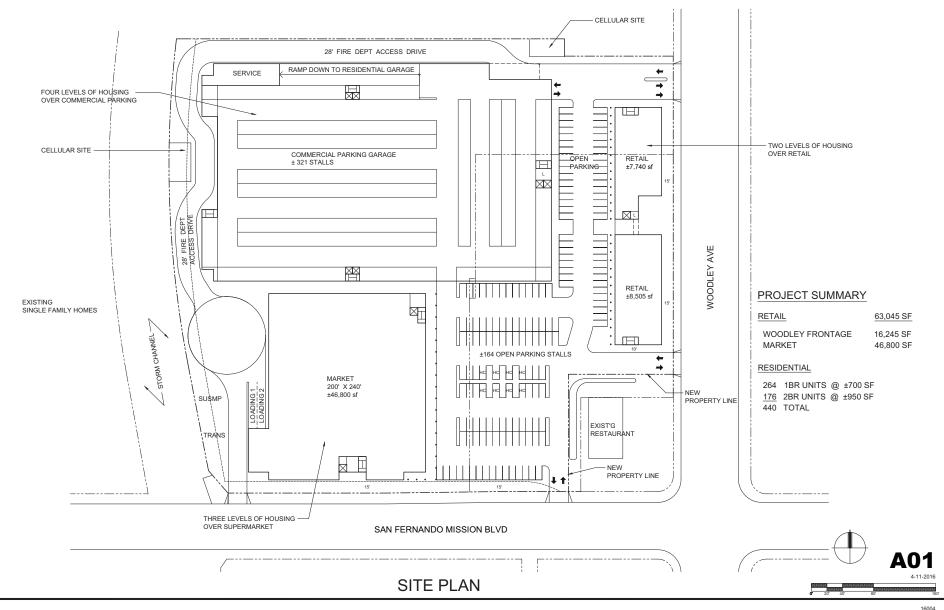
Please contact me if you have questions or comments.

Sincerely,

Liz Culhane-Fleming

Attachments

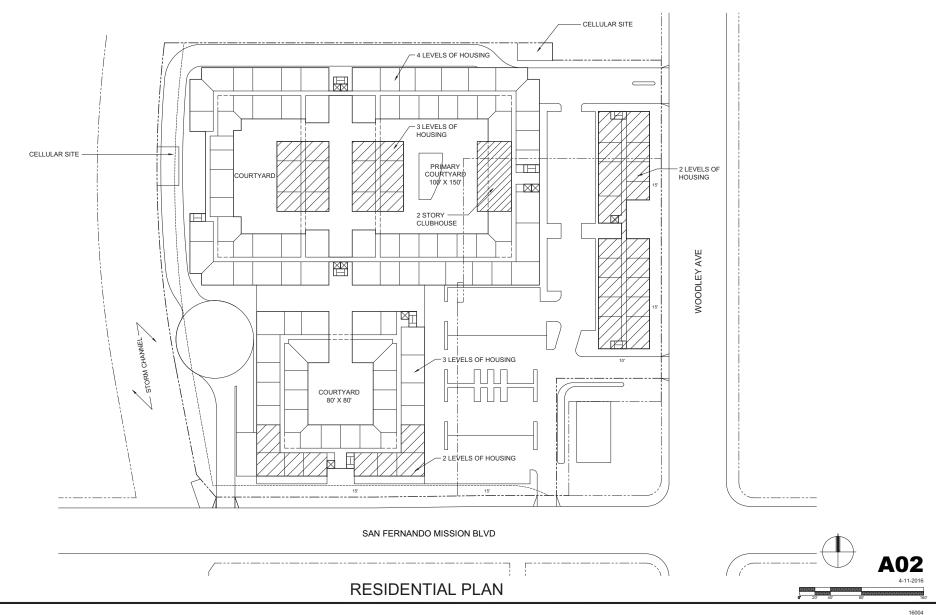
# ATTACHMENT A PROJECT SITE PLAN



PREPARED FOR:
Marc Anthony Development

# **WOODLEY & SAN FERNANDO MISSION**

1739 FERRIEN THEFT SANTA MONAZO CA 9484 TIL 3030-MIZO CA PARA MONAZO CA 9484 TIL 9484 TIL



# ATTACHMENT B

Aerial of San Fernando Mission and Woodley Avenue

# SAN FERNANDO MISSION BL & WOODLEY AVE



### ATTACHMENT C

### TRAFFIC COUNTS



TOTAL

206

1632

414

2252

STREET: North/South Woodley Ave East/West San Fernando Mission Blvd June 9, 2016 Weather: SUNNY Day: Thursday Date: 7-10 & 3-6 Hours: Chekrs: NDS YES School Day: District: I/S CODE N/B S/B E/B W/B DUAL-WHEELED 21 26 11 18 BIKES 9 15 11 14 BUSES 9 0 0 N/B TIME S/B TIME E/B TIME W/B TIME AM PK 15 MIN 73 8.00 119 7.45 89 8.00 98 8.45 17.00 PM PK 15 MIN 173 83 16.45 145 17.15 139 17.15 AM PK HOUR 8.00 260 389 7.30 307 7.30 354 8.15 PM PK HOUR 640 17.00 295 16.30 564 17.00 481 16.30 NORTHBOUND Approach SOUTHBOUND Approach TOTAL XING S/L XING N/L Hours Total Hours Total Rt Th Rt N-S Sch Sch Ped Ped 7-8 97 51 7-8 22 353 10 35 183 41 290 536 4 10 8-9 65 129 260 8-9 24 233 29 286 546 4 0 73 49 49 0 9-10 105 227 9-10 150 26 225 452 1 6 0 83 270 81 0 15-16 434 15-16 44 178 35 257 691 1 0 16-17 100 352 105 16-17 45 184 39 4 0 11 408 640 55 271 911 111 179 15 17-18 17-18 TOTAL 467 1361 473 2301 TOTAL 258 1214 188 1660 3961 23 48 **EASTBOUND Approach** WESTBOUND Approach TOTAL XING W/L XING E/L Total Total Hours Th Rt Hours Th Rt E-W Ped Sch Ped Sch 7-8 30 179 7-8 89 10 15 163 8-9 20 194 59 273 8-9 109 212 27 348 621 1 12 54 94 0 9-10 17 170 241 9-10 191 29 314 555 4 7 0 15-16 39 15-16 62 322 62 255 31 348 0 771 6 45 296 16-17 362 87 16-17 66 48 410 904 1 0 17-18 55 405 104 564 91 319 452 1016 6 0 16 17-18

TOTAL

511

1436

220

2167

4419

22 11

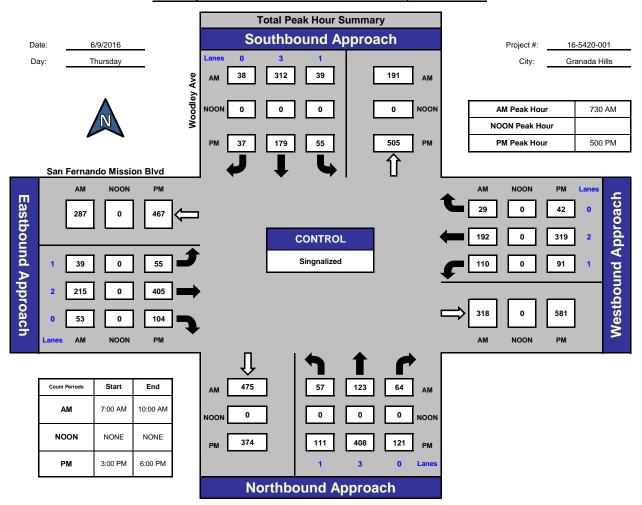
52

### **ITM Peak Hour Summary**

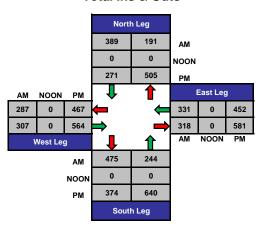


National Data & Surveying Services

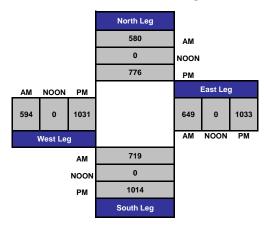
#### Woodley Ave and San Fernando Mission Blvd, Granada Hills







#### **Total Volume Per Leg**



### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday **TOTALS** 

Date: 6/9/2016

City: Granada Hills AM

| _                    | AM           |            |        |         |            |         |          |             |        |          |             |        |          |
|----------------------|--------------|------------|--------|---------|------------|---------|----------|-------------|--------|----------|-------------|--------|----------|
| NS/EW Streets:       | W            | oodley Ave |        | W       | oodley Ave |         | San Fern | ando Missic | n Blvd | San Fern | ando Missio | n Blvd |          |
| •                    | NO           | ORTHBOUN   | D      | SC      | OUTHBOUND  | )       | E        | ASTBOUND    | )      | V        | VESTBOUND   | )      | <u> </u> |
| LANES:               | NL           | NT<br>3    | NR     | SL<br>1 | ST<br>3    | SR<br>0 | EL<br>1  | ET<br>2     | ER     | WL       | WT          | WR     | TOTAL    |
| LAINES:              | 1            | 3          | 0      | 1       | 3          | U       | 1        | 2           | 0      |          | 2           | 0      |          |
| 7:00 AM              | 4            | 18         | 11     | 10      | 55         | 2       | 3        | 38          | 14     | 22       | 26          | 9      | 212      |
| 7:15 AM              | 4            | 22         | 13     | 7       | 59         | 2       | 5        | 33          | 11     | 21       | 35          | 18     | 230      |
| 7:30 AM              | 20           | 22         | 11     | 9       | 80         | 10      | 14       | 50          | 10     | 22       | 57          | 13     | 318      |
| 7:45 AM              | 7            | 35         | 16     | 15      | 96         | 8       | 8        | 58          | 13     | 24       | 45          | 3      | 328      |
| 8:00 AM              | 15           | 41         | 17     | 11      | 73         | 14      | 13       | 58          | 18     | 26       | 47          | 8      | 341      |
| 8:15 AM              | 15           | 25         | 20     | 4       | 63         | 6       | 4        | 49          | 12     | 38       | 43          | 5      | 284      |
| 8:30 AM              | 20           | 30         | 14     | 4       | 61         | 5       | 1        | 42          | 13     | 23       | 53          | 7      | 273      |
| 8:45 AM              | 15           | 33         | 15     | 5       | 36         | 4       | 2        | 45          | 16     | 22       | 69          | 7      | 269      |
| 9:00 AM              | 17           | 24         | 16     | 10      | 40         | 5       | 5        | 54          | 14     | 29       | 53          | 5      | 272      |
| 9:15 AM              | 14           | 21         | 11     | 13      | 33         | 12      | 4        | 42          | 10     | 18       | 46          | 11     | 235      |
| 9:30 AM              | 21           | 29         | 9      | 10      | 37         | 2       | 3        | 36          | 15     | 20       | 40          | 6      | 228      |
| 9:45 AM              | 21           | 31         | 13     | 16      | 40         | 7       | 5        | 38          | 15     | 27       | 52          | 7      | 272      |
|                      | NL           | NT         | NR     | SL      | ST         | SR      | EL       | ET          | ER     | WL       | WT          | WR     | TOTAL    |
| TOTAL VOLUMES:       | 173          | 331        | 166    | 114     | 673        | 77      | 67       | 543         | 161    | 292      | 566         | 99     | 3262     |
| APPROACH %'s:        | 25.82%       | 49.40%     | 24.78% | 13.19%  | 77.89%     | 8.91%   | 8.69%    | 70.43%      | 20.88% | 30.51%   | 59.14%      | 10.34% |          |
| PEAK HR START TIME : | 730 <i>F</i> | MA         |        |         |            |         |          |             |        |          |             |        | TOTAL    |
| PEAK HR VOL:         | 57           | 123        | 64     | 39      | 312        | 38      | 39       | 215         | 53     | 110      | 192         | 29     | 1271     |
| PEAK HR FACTOR :     |              | 0.836      |        |         | 0.817      |         |          | 0.862       |        |          | 0.899       |        | 0.932    |

# Intersection Turning Movement Prepared by: National Data & Surveying Services

Project ID: 16-5420-001 Day: Thursday **TOTALS** 

Date: 6/9/2016

City: Granada Hills РМ

| _  | PM   |  |  |   |  |   |  |   |   |  |   |  |   |
|--|--|--|--|---|--|---|--|---|---|--|---|--|---|
| NS/EW Streets:   | w  | oodley Ave   |  | W   | oodley Ave   |   | San Fern   | ando Missio   | n Blvd  | San Fern   | ando Missio   | n Blvd   |   |
|  | N  | ORTHBOUN   | D  | SC  | OUTHBOUNI  | D   | E  | ASTBOUND  | )   | V  | VESTBOUND   | )  |   |
| LANES:   | NL<br>1  | NT<br>3  | NR<br>0  | SL<br>1   | ST<br>3  | SR<br>0   | EL<br>1  | ET<br>2   | ER<br>0   | WL<br>1  | WT<br>2   | WR<br>0  | TOTAL   |
| 3:00 PM<br>3:15 PM<br>3:30 PM<br>3:45 PM<br>4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:30 PM | 17<br>20<br>17<br>29<br>26<br>24<br>29<br>21<br>31<br>27<br>28<br>25 | 50<br>68<br>64<br>88<br>72<br>106<br>83<br>91<br>112<br>100<br>86<br>110 | 18<br>19<br>22<br>22<br>24<br>29<br>26<br>26<br>30<br>27<br>36<br>28 | 7<br>12<br>10<br>15<br>11<br>10<br>11<br>13<br>18<br>10<br>10 | 32<br>44<br>54<br>48<br>37<br>45<br>44<br>58<br>50<br>54<br>39<br>36 | 5<br>8<br>13<br>9<br>8<br>12<br>7<br>12<br>7<br>11<br>9 | 5<br>14<br>6<br>14<br>13<br>11<br>10<br>11<br>14<br>11<br>14 | 79<br>97<br>82<br>64<br>70<br>102<br>100<br>90<br>100<br>103<br>104<br>98 | 9<br>21<br>13<br>19<br>18<br>20<br>25<br>24<br>26<br>31<br>23<br>24 | 12<br>15<br>15<br>20<br>13<br>11<br>22<br>20<br>17<br>24<br>22<br>28 | 56<br>75<br>68<br>56<br>71<br>58<br>78<br>89<br>80<br>102<br>65<br>72 | 8<br>7<br>4<br>12<br>19<br>6<br>11<br>12<br>13<br>13<br>8<br>8 | 298<br>400<br>368<br>396<br>382<br>434<br>446<br>467<br>498<br>513<br>444 |
| TOTAL VOLUMES :<br>APPROACH %'s :  | NL<br>294<br>18.03%  | NT<br>1030<br>63.15%   | NR<br>307<br>18.82%  | SL<br>144<br>18.09%   | ST<br>541<br>67.96%  | SR<br>111<br>13.94%                                     | EL<br>139<br>9.39%   | ET<br>1089<br>73.53%  | ER<br>253<br>17.08%   | WL<br>219<br>18.10%  | WT<br>870<br>71.90%   | WR<br>121<br>10.00%  |   |
| PEAK HR START TIME :   | 500 F  | PM   |  |   |  |   |  |   |   |  |   |  | TOTAL   |
| PEAK HR VOL :  | 111  | 408  | 121  | 55  | 179  | 37  | 55   | 405   | 104   | 91   | 319   | 42   | 1927  |
| PEAK HR FACTOR :   |  | 0.925  |  |   | 0.903  |   |  | 0.972   |   |  | 0.813   |  | 0.939   |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday CARS

Date: 6/9/2016

City: Granada Hills

| _   | AM  |  |   |  |  |  |  |  |  |  |  |  |  |
|---|---|--|---|--|--|--|--|--|--|--|--|--|--|
| NS/EW Streets:  | w   | oodley Ave   |   | W  | oodley Ave   |  | San Fern   | ando Missic  | on Blvd  | San Fern   | ando Missio  | n Blvd   |  |
|   | NO  | ORTHBOUN   | D   | SC   | DUTHBOUND  | )  | E  | ASTBOUND   | )  | ٧  | VESTBOUND  | )  |  |
| LANES:  | NL<br>1   | NT<br>3  | NR<br>0   | SL<br>1  | ST<br>3  | SR<br>0  | EL<br>1  | ET<br>2  | ER<br>0  | WL<br>1  | WT<br>2  | WR<br>0  | TOTAL  |
| 7:00 AM<br>7:15 AM<br>7:30 AM<br>7:45 AM<br>8:00 AM<br>8:15 AM<br>8:30 AM<br>8:45 AM<br>9:00 AM<br>9:15 AM<br>9:30 AM | 4<br>4<br>20<br>7<br>15<br>15<br>18<br>15<br>17<br>14<br>21 | 16<br>21<br>22<br>35<br>41<br>24<br>29<br>33<br>22<br>21<br>29<br>28 | 10<br>13<br>11<br>16<br>16<br>19<br>14<br>14<br>16<br>11<br>9 | 10<br>7<br>9<br>15<br>11<br>4<br>4<br>10<br>12<br>10 | 55<br>59<br>79<br>94<br>73<br>61<br>59<br>36<br>39<br>30<br>37<br>38 | 2<br>2<br>10<br>8<br>14<br>6<br>5<br>4<br>5<br>11<br>2 | 3<br>5<br>14<br>8<br>13<br>4<br>1<br>2<br>5<br>4<br>3<br>5 | 38<br>33<br>50<br>58<br>58<br>49<br>41<br>45<br>54<br>41<br>35<br>38 | 14<br>11<br>10<br>13<br>18<br>12<br>13<br>15<br>13<br>10<br>15 | 22<br>21<br>22<br>23<br>24<br>38<br>22<br>22<br>29<br>18<br>20<br>27 | 26<br>35<br>57<br>45<br>47<br>43<br>53<br>69<br>53<br>46<br>40<br>51 | 9<br>18<br>13<br>3<br>8<br>5<br>5<br>6<br>5<br>11<br>5 | 209<br>229<br>317<br>325<br>338<br>280<br>264<br>265<br>268<br>229<br>226<br>263 |
| TOTAL VOLUMES :<br>APPROACH %'s :   | NL<br>170<br>26.03%   | NT<br>321<br>49.16%  | NR<br>162<br>24.81%   | SL<br>110<br>13.00%                                  | ST<br>660<br>78.01%  | SR<br>76<br>8.98%                                      | EL<br>67<br>8.75%  | ET<br>540<br>70.50%  | ER<br>159<br>20.76%  | WL<br>288<br>30.38%  | WT<br>565<br>59.60%  | WR<br>95<br>10.02%                                     |  |
| PEAK HR START TIME :  | 730 <i>F</i>  |  | (2 <b>I</b>   | 20   | 207  | 20.  | 20   | 215  | F2   | 107  | 100  | 20   | TOTAL  |
| PEAK HR VOL :   | 57  | 122  | 62  | 39   | 307  | 38   | 39   | 215  | 53   | 107  | 192  | 29   | 1260   |
| PEAK HR FACTOR:   |   | 0.837  |   |  | 0.821  |  |  | 0.862  |  |  | 0.891  |  | 0.932  |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday CARS

Date: 6/9/2016

City: Granada Hills ΡМ

| _  | PM   |   |  |   |  |   |  |   |   |  |   |  |   |
|--|--|---|--|---|--|---|--|---|---|--|---|--|---|
| NS/EW Streets:   | w  | oodley Ave  |  | W   | oodley Ave   |   | San Fern   | ando Missio   | n Blvd  | San Fern   | ando Missio   | n Blvd   |   |
|  | N  | ORTHBOUN  | D  | SC  | OUTHBOUNI  | D   | E  | ASTBOUND  |   | V  | /ESTBOUND   |  | <u> </u>  |
| LANES:   | NL<br>1  | NT<br>3   | NR<br>0  | SL<br>1   | ST<br>3  | SR<br>0   | EL<br>1  | ET<br>2   | ER<br>0   | WL<br>1  | WT<br>2   | WR<br>0  | TOTAL   |
| 3:00 PM<br>3:15 PM<br>3:30 PM<br>3:45 PM<br>4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:30 PM | 17<br>20<br>17<br>29<br>26<br>24<br>29<br>21<br>30<br>27<br>28<br>25 | 50<br>66<br>64<br>87<br>72<br>104<br>83<br>89<br>112<br>98<br>86<br>109 | 18<br>18<br>21<br>22<br>24<br>29<br>26<br>26<br>30<br>27<br>36<br>28 | 6<br>12<br>10<br>15<br>11<br>10<br>10<br>13<br>18<br>10<br>10 | 32<br>43<br>54<br>48<br>35<br>45<br>43<br>56<br>48<br>53<br>39<br>36 | 5<br>8<br>13<br>9<br>8<br>11<br>7<br>12<br>7<br>11<br>9 | 5<br>14<br>6<br>14<br>13<br>11<br>10<br>11<br>14<br>11<br>14 | 79<br>96<br>82<br>64<br>70<br>102<br>100<br>90<br>100<br>102<br>104<br>97 | 8<br>20<br>13<br>19<br>18<br>20<br>25<br>24<br>25<br>31<br>23<br>24 | 12<br>15<br>14<br>20<br>13<br>11<br>22<br>20<br>17<br>24<br>22<br>28 | 55<br>74<br>67<br>56<br>70<br>58<br>77<br>89<br>80<br>102<br>65<br>72 | 8<br>7<br>4<br>12<br>18<br>6<br>11<br>12<br>12<br>12<br>8<br>8 | 295<br>393<br>365<br>395<br>378<br>431<br>443<br>463<br>493<br>508<br>444 |
| TOTAL VOLUMES :<br>APPROACH %'s :  | NL<br>293<br>18.11%  | NT<br>1020<br>63.04%  | NR<br>305<br>18.85%  | SL<br>142<br>18.14%   | ST<br>532<br>67.94%  | SR<br>109<br>13.92%                                     | EL<br>139<br>9.42%   | ET<br>1086<br>73.63%  | ER<br>250<br>16.95%   | WL<br>218<br>18.15%  | WT<br>865<br>72.02%   | WR<br>118<br>9.83%   | TOTAL<br>5077   |
| PEAK HR START TIME : PEAK HR VOL :   | 500 F  | PM 405  | 121  | 55  | 176  | 36  | 55   | 403   | 103   | 91   | 319   | 40   | TOTAL<br>1914   |
| PEAK HR FACTOR :   |  | 0.924   |  |   | 0.902  |   |  | 0.974   |   |  | 0.815   |  | 0.942   |

### PREPARED BY NATIONAL DATA & SURVEYING SERVICES

DAY:

PROJECT#: 16-5420-001 N/S Street: Woodley Ave

E/W Street: San Fernando Mission Blvd

DATE: 6/9/2016 CITY: Granada Hills

A M

Adult Pedestrians

| Tiddit T CdCSt | dan redestraris |       |      |       |      |     |     |       |  |  |  |  |
|----------------|-----------------|-------|------|-------|------|-----|-----|-------|--|--|--|--|
| TIME           | NORT            | H LEG | SOUT | H LEG | EAST | LEG | WES | T LEG |  |  |  |  |
| IIIVIE         | EB              | WB    | EB   | WB    | NB   | SB  | NB  | SB    |  |  |  |  |
| 7:00 AM        | 0               | 0     | 1    | 0     | 0    | 0   | 0   | 1     |  |  |  |  |
| 7:15 AM        | 0               | 1     | 0    | 2     | 6    | 2   | 0   | 0     |  |  |  |  |
| 7:30 AM        | 0               | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |
| 7:45 AM        | 0               | 1     | 0    | 1     | 0    | 2   | 3   | 0     |  |  |  |  |
| 8:00 AM        | 1               | 0     | 0    | 0     | 0    | 0   | 1   | 0     |  |  |  |  |
| 8:15 AM        | 1               | 1     | 0    | 1     | 1    | 1   | 0   | 0     |  |  |  |  |
| 8:30 AM        | 1               | 3     | 1    | 0     | 7    | 3   | 0   | 0     |  |  |  |  |
| 8:45 AM        | 0               | 0     | 1    | 1     | 0    | 0   | 0   | 0     |  |  |  |  |
| 9:00 AM        | 1               | 1     | 0    | 0     | 2    | 2   | 0   | 0     |  |  |  |  |
| 9:15 AM        | 1               | 0     | 0    | 0     | 1    | 0   | 0   | 0     |  |  |  |  |
| 9:30 AM        | 1               | 0     | 0    | 0     | 0    | 2   | 0   | 0     |  |  |  |  |
| 9:45 AM        | 1               | 1     | 1    | 0     | 0    | 0   | 0   | 4     |  |  |  |  |
| TOTALS         | 7               | 8     | 4    | 5     | 17   | 12  | 4   | 5     |  |  |  |  |

School-Aged Pedestrians

Thursday

| Scribbi-Ageu | CHOOF-Ayeu Fedestilans |       |      |       |      |     |     |       |  |  |  |  |  |
|--------------|------------------------|-------|------|-------|------|-----|-----|-------|--|--|--|--|--|
| TIME         | NORT                   | H LEG | SOUT | H LEG | EAST | LEG | WES | T LEG |  |  |  |  |  |
| I I IVI E    | EB                     | WB    | EB   | WB    | NB   | SB  | NB  | SB    |  |  |  |  |  |
| 7:00 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 7:15 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 7:30 AM      | 0                      | 3     | 0    | 2     | 8    | 1   | 5   | 1     |  |  |  |  |  |
| 7:45 AM      | 0                      | 7     | 2    | 6     | 5    | 1   | 2   | 0     |  |  |  |  |  |
| 8:00 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 3     |  |  |  |  |  |
| 8:15 AM      | 0                      | 2     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 8:30 AM      | 0                      | 0     | 0    | 0     | 1    | 0   | 0   | 0     |  |  |  |  |  |
| 8:45 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 9:00 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 9:15 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 9:30 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 9:45 AM      | 0                      | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| TOTALS       | 0                      | 12    | 2    | 8     | 14   | 2   | 7   | 4     |  |  |  |  |  |

P M Adult Pedestrians

| TIME    | NORT | H LEG | SOUT | H LEG | EAST | LEG | WES | T LEG |  |  |  |
|---------|------|-------|------|-------|------|-----|-----|-------|--|--|--|
| TIME    | EB   | WB    | EB   | WB    | NB   | SB  | NB  | SB    |  |  |  |
| 3:00 PM | 0    | 6     | 0    | 0     | 0    | 0   | 1   | 2     |  |  |  |
| 3:15 PM | 0    | 0     | 0    | 0     | 0    | 2   | 0   | 0     |  |  |  |
| 3:30 PM | 1    | 0     | 1    | 0     | 0    | 0   | 0   | 1     |  |  |  |
| 3:45 PM | 0    | 0     | 0    | 0     | 0    | 0   | 1   | 1     |  |  |  |
| 4:00 PM | 0    | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |
| 4:15 PM | 1    | 4     | 0    | 3     | 3    | 1   | 0   | 0     |  |  |  |
| 4:30 PM | 4    | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |
| 4:45 PM | 1    | 1     | 0    | 1     | 1    | 0   | 1   | 0     |  |  |  |
| 5:00 PM | 3    | 3     | 1    | 0     | 2    | 4   | 0   | 1     |  |  |  |
| 5:15 PM | 2    | 3     | 1    | 3     | 5    | 2   | 2   | 0     |  |  |  |
| 5:30 PM | 3    | 0     | 1    | 0     | 0    | 1   | 0   | 1     |  |  |  |
| 5:45 PM | 1    | 0     | 1    | 2     | 2    | 0   | 2   | 0     |  |  |  |
| TOTALS  | 16   | 17    | 5    | 9     | 13   | 10  | 7   | 6     |  |  |  |

School-Aged Pedestrians

| School riged | ochoor-ageu redestraris |       |      |       |      |     |     |       |  |  |  |  |  |
|--------------|-------------------------|-------|------|-------|------|-----|-----|-------|--|--|--|--|--|
| TIME         | NORT                    | H LEG | SOUT | H LEG | EAST | LEG | WES | T LEG |  |  |  |  |  |
| ITIVIE       | EB                      | WB    | EB   | WB    | NB   | SB  | NB  | SB    |  |  |  |  |  |
| 3:00 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 3:15 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 3:30 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 3:45 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 4:00 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 4:15 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 4:30 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 4:45 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 5:00 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 5:15 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 5:30 PM      | 0                       | 0     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| 5:45 PM      | 0                       | 7     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |
| TOTALS       | 0                       | 7     | 0    | 0     | 0    | 0   | 0   | 0     |  |  |  |  |  |

# Intersection Turning Movement Prepared by: National Data & Surveying Services

Project ID: 16-5420-001 Day: Thursday **BIKES** Date: 6/9/2016

City: Granada Hills ΔМ

| _                    | AM           |            |         |       |            |         |          |             |         |          |              | 1       |       |
|----------------------|--------------|------------|---------|-------|------------|---------|----------|-------------|---------|----------|--------------|---------|-------|
| NS/EW Streets:       | W            | oodley Ave |         | W     | oodley Ave |         | San Fern | ando Missio | on Blvd | San Ferr | nando Missio | n Blvd  |       |
| •                    | N            | ORTHBOUN   | D       | SC    | OUTHBOUN   | D       | E        | EASTBOUND   | )       | ١        | WESTBOUND    | )       |       |
| LANES:               | NL           | NT<br>3    | NR<br>0 | SL    | ST<br>3    | SR<br>0 | EL       | ET<br>2     | ER<br>0 | WL<br>1  | WT<br>2      | WR<br>0 | TOTAL |
| LAINES.              | I            | 3          | U       |       | 3          | U       | 1        | 2           | U       |          | 2            | U       |       |
| 7:00 AM              | 0            | 0          | 0       | 0     | 1          | 0       | 0        | 0           | 0       | 0        | 2            | 0       | 3     |
| 7:15 AM              | 0            | 0          | 0       | 0     | 0          | 0       | 0        | 1           | 0       | 0        | 0            | 0       | 1     |
| 7:30 AM              | 0            | 0          | 0       | 0     | 2          | 0       | 0        | 0           | 0       | 0        | 0            | 0       | 2     |
| 7:45 AM              | 0            | 0          | 1       | 0     | 0          | 0       | 0        | 0           | 0       | 0        | 0            | 0       | 1     |
| 8:00 AM              | 0            | 0          | 0       | 0     | 0          | 0       | 0        | 0           | 1       | 0        | 0            | 0       | 1     |
| 8:15 AM              | 0            | 0          | 1       | 0     | 0          | 0       | 0        | 0           | 0       | 0        | 0            | 0       | 1     |
| 8:30 AM              | 0            | 0          | 0       | 0     | 0          | 0       | 0        | 1           | 0       | 0        | 1            | 0       | 2     |
| 8:45 AM              | 0            | 0          | 0       | 0     | 0          | 0       | 0        | 0           | 0       | 0        | 1            | 0       | 1     |
| 9:00 AM              | 0            | 1          | 0       | 0     | 0          | 1       | 3        | 0           | 0       | 0        | 1            | 0       | 6     |
| 9:15 AM              | 0            | 0          | 0       | 0     | 1          | 0       | 0        | 0           | 0       | 0        | 0            | 0       | 1     |
| 9:30 AM              | 0            | 0          | 0       | 0     | 1          | 0       | 0        | 4           | 0       | 0        | 0            | 0       | 5     |
| 9:45 AM              | 0            | 1          | 0       | 0     | 0          | 0       | 0        | 0           | 0       | 0        | 0            | 0       | 1     |
|                      | NL           | NT         | NR      | SL    | ST         | SR      | EL       | ET          | ER      | WL       | WT           | WR      | TOTAL |
| TOTAL VOLUMES:       | 0            | 2          | 2       | 0     | 5          | 1       | 3        | 6           | 1       | 0        | 5            | 0       | 25    |
| APPROACH %'s:        | 0.00%        | 50.00%     | 50.00%  | 0.00% | 83.33%     | 16.67%  | 30.00%   | 60.00%      | 10.00%  | 0.00%    | 100.00%      | 0.00%   | l I   |
| PEAK HR START TIME : | 730 <i>F</i> | MA         |         |       |            |         |          |             |         |          |              |         | TOTAL |
| PEAK HR VOL:         | 0            | 0          | 2       | 0     | 2          | 0       | 0        | 0           | 1       | 0        | 0            | 0       | 5     |
| PEAK HR FACTOR:      |              | 0.500      |         |       | 0.250      |         |          | 0.250       |         |          | 0.000        |         | 0.625 |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday **BIKES** 

Date: 6/9/2016

City: Granada Hills

| _  | PW  |   |   |   |  |                                      |   |  |   |                                 |  |   | ı   |
|--|---|---|---|---|--|--------------------------------------|---|--|---|---------------------------------|--|---|---|
| NS/EW Streets:   | W   | oodley Ave  |   | w   | oodley Ave                                     |                                      | San Fern                                  | ando Missic                                    | n Blvd                                    | San Fern                        | ando Missio                                    | n Blvd                                    |   |
|  | NO  | ORTHBOUN  | D   | SC  | DUTHBOUNE                                      | )                                    | E   | ASTBOUND                                       | )   | ٧                               | VESTBOUNE                                      | )   |   |
| LANES:   | NL<br>1                                   | NT<br>3   | NR<br>0   | SL<br>1                                   | ST<br>3  | SR<br>0                              | EL<br>1                                   | ET<br>2  | ER<br>0                                   | WL<br>1                         | WT<br>2  | WR<br>0                                   | TOTAL   |
| 3:00 PM<br>3:15 PM<br>3:30 PM<br>3:45 PM<br>4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:30 PM | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>1<br>0<br>1<br>0<br>3<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>1<br>1<br>1<br>0<br>0 | 0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 1<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>1<br>0<br>1<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>1<br>0<br>0<br>1 | 0<br>0<br>0<br>0<br>1<br>0<br>0<br>0<br>0 | 1<br>3<br>1<br>2<br>2<br>2<br>1<br>5<br>1<br>2<br>4 |
| TOTAL VOLUMES :<br>APPROACH %'s :  | NL<br>3<br>27.27%                         | NT<br>6<br>54.55%                                   | NR<br>2<br>18.18%   | SL<br>1<br>20.00%                         | ST<br>4<br>80.00%                              | SR<br>0<br>0.00%                     | EL<br>1<br>25.00%                         | ET<br>2<br>50.00%                              | ER<br>1<br>25.00%                         | WL<br>0<br>0.00%                | WT<br>2<br>50.00%                              | WR<br>2<br>50.00%                         |   |
| PEAK HR START TIME :  PEAK HR VOL :  PEAK HR FACTOR :  | 500 F                                     | 4<br>0.400  | 1   | 0   | 2  | 0                                    | 0   | 0.000  | 0   | 0                               | 1<br>0.500                                     | 1   | 12<br>0.600   |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday **BUSES** 

Date: 6/9/2016

City: Granada Hills AM

| NS/EW Streets:       | V     | Vocallou Aug |       | V     | Vocallan Ana |       |        | rnando Missi   | on Dhial | Cam Fan | nando Missi   | an Dhad | 1     |
|----------------------|-------|--------------|-------|-------|--------------|-------|--------|----------------|----------|---------|---------------|---------|-------|
| NS/EW Streets:       | V     | Voodley Ave  |       | V     | Voodley Ave  |       | San Fe | rnando iviissi | on Biva  | San Fer | nando iviissi | on Biva |       |
|                      | N     | IORTHBOUND   | D     | S     | OUTHBOUND    | )     |        | EASTBOUNI      | D        |         | WESTBOUN      | D       |       |
|                      | NL    | NT           | NR    | SL    | ST           | SR    | EL     | ET             | ER       | WL      | WT            | WR      | TOTAL |
| LANES:               | 1     | 3            | 0     | 1     | 3            | 0     | 1      | 2              | 0        | 1       | 2             | 0       |       |
| 7:00 AM              | 0     | 1            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| 7:15 AM              | 0     | 1            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| 7:30 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 7:45 AM              | 0     | 0            | 0     | 0     | 1            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| 8:00 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 8:15 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 8:30 AM              | 0     | 1            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| 8:45 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 9:00 AM              | 0     | 1            | 0     | 0     | 1            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 2     |
| 9:15 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 9:30 AM              | 0     | 0            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       |       |
| 9:45 AM              | 0     | 1            | 0     | 0     | 0            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| T                    | NL    | NT           | NR    | SL    | ST           | SR    | EL     | ET             | ER       | WL      | WT            | WR      | TOTAL |
| TOTAL VOLUMES:       | 0     | 5            | 0     | 0     | 2            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 7     |
| APPROACH %'s:        | 0.00% | 100.00%      | 0.00% | 0.00% | 100.00%      | 0.00% |        |                |          |         |               |         |       |
| PEAK HR START TIME : | 730   | AM           |       |       |              |       |        |                |          |         |               |         | TOTAL |
| PEAK HR VOL:         | 0     | 0            | 0     | 0     | 1            | 0     | 0      | 0              | 0        | 0       | 0             | 0       | 1     |
| PEAK HR FACTOR:      |       | 0.000        |       |       | 0.250        |       |        | 0.000          |          |         | 0.000         |         | 0.250 |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday **BUSES** 

Date: 6/9/2016

City: Granada Hills

| _  |                                      |  |   |                                      |  | PI                                   | /1                                   |                                      |                                      |                                      |                                      |                                      | •                |
|--|--------------------------------------|--|---|--------------------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------|
| NS/EW Streets:   | ٧                                    | Voodley Ave                                    |   | V                                    | Voodley Ave  |                                      | San Fe                               | rnando Missi                         | on Blvd                              | San Fer                              | nando Missi                          | on Blvd                              |                  |
|  | N                                    | ORTHBOUNE                                      | )   | S                                    | OUTHBOUNI  | )                                    |                                      | EASTBOUN                             | D                                    | •                                    | WESTBOUN                             | D                                    |                  |
| LANES:   | NL<br>1                              | NT<br>3  | NR<br>0                                   | SL<br>1                              | ST<br>3  | SR<br>0                              | EL<br>1                              | ET<br>2                              | ER<br>0                              | WL<br>1                              | WT<br>2                              | WR<br>0                              | TOTAL            |
| 3:00 PM<br>3:15 PM<br>3:30 PM<br>3:45 PM<br>4:00 PM<br>4:15 PM<br>4:30 PM<br>4:45 PM<br>5:00 PM<br>5:15 PM<br>5:30 PM<br>5:30 PM | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>1<br>0<br>0<br>0<br>1<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>1<br>0<br>0<br>1<br>0<br>0<br>0<br>0<br>1<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 2<br>1<br>1<br>1 |
| TOTAL VOLUMES :<br>APPROACH %'s :  | NL<br>0<br>0.00%                     | NT<br>4<br>100.00%                             | NR<br>0<br>0.00%                          | SL<br>0<br>0.00%                     | ST<br>3<br>100.00%                                       | SR<br>0<br>0.00%                     | EL<br>0                              | ET<br>0                              | ER<br>0                              | WL<br>0                              | WT<br>0                              | WR<br>0                              | TOTAL 7          |
| PEAK HR START TIME :  PEAK HR VOL :  PEAK HR FACTOR :  | 0                                    | 2<br>0.500                                     | 0   | 0                                    | 1<br>0.250   | 0                                    | 0                                    | 0.000                                | 0                                    | 0                                    | 0.000                                | 0                                    | 3<br>0.750       |

# Intersection Turning Movement Prepared by: National Data & Surveying Services

Project ID: 16-5420-001 Day: Thursday **HEAVY TRUCKS** 

Date: 6/9/2016

City: Granada Hills

| -                    | AM           |            |         |            |            |         |          |             |         |          |          |         |       |
|----------------------|--------------|------------|---------|------------|------------|---------|----------|-------------|---------|----------|----------|---------|-------|
| NS/EW Streets:       | W            | oodley Ave |         | W          | oodley Ave |         | San Fern | ando Missic | n Blvd  | San Fern | n Blvd   |         |       |
|                      | NO           | ORTHBOUN   | D       | SOUTHBOUND |            |         | E        | ASTBOUND    | )       | V        | <u> </u> |         |       |
| LANES:               | NL           | NT<br>3    | NR<br>0 | SL<br>1    | ST<br>3    | SR<br>0 | EL<br>1  | ET<br>2     | ER<br>0 | WL<br>1  | WT<br>2  | WR<br>0 | TOTAL |
| LANES:               | · ·          | 3          | U       | ı          | 3          | U       | '        | 2           | U       |          | 2        | U       |       |
| 7:00 AM              | 0            | 1          | 1       | 0          | 0          | 0       | 0        | 0           | 0       | 0        | 0        | 0       | 2     |
| 7:15 AM              | 0            | 0          | 0       | 0          | 0          | 0       | 0        | 0           | 0       | 0        | 0        | 0       |       |
| 7:30 AM              | 0            | 0          | 0       | 0          | 1          | 0       | 0        | 0           | 0       | 0        | 0        | 0       | 1     |
| 7:45 AM              | 0            | 0          | 0       | 0          | 1          | 0       | 0        | 0           | 0       | 1        | 0        | 0       | 2     |
| 8:00 AM              | 0            | 0          | 1       | 0          | 0          | 0       | 0        | 0           | 0       | 2        | 0        | 0       | 3     |
| 8:15 AM              | 0            | 1          | 1       | 0          | 2          | 0       | 0        | 0           | 0       | 0        | 0        | 0       | 4     |
| 8:30 AM              | 2            | 0          | 0       | 0          | 2          | 0       | 0        | 1           | 0       | 1        | 0        | 2       | 8     |
| 8:45 AM              | 0            | 0          | 1       | 1          | 0          | 0       | 0        | 0           | 1       | 0        | 0        | 1       | 4     |
| 9:00 AM              | 0            | 1          | 0       | 0          | 0          | 0       | 0        | 0           | 1       | 0        | 0        | 0       | 2     |
| 9:15 AM              | 0            | 0          | 0       | 1          | 3          | 1       | 0        | 1           | 0       | 0        | 0        | 0       | 6     |
| 9:30 AM              | 0            | 0          | 0       | 0          | 0          | 0       | 0        | 1           | 0       | 0        | 0        | 1       | 2     |
| 9:45 AM              | 1            | 2          | 0       | 2          | 2          | 0       | 0        | 0           | 0       | 0        | 1        | 0       | 8     |
|                      | NL           | NT         | NR      | SL         | ST         | SR      | EL       | ET          | ER      | WL       | WT       | WR      | TOTAL |
| TOTAL VOLUMES:       | 3            | 5          | 4       | 4          | 11         | 1       | 0        | 3           | 2       | 4        | 1        | 4       | 42    |
| APPROACH %'s:        | 25.00%       | 41.67%     | 33.33%  | 25.00%     | 68.75%     | 6.25%   | 0.00%    | 60.00%      | 40.00%  | 44.44%   | 11.11%   | 44.44%  |       |
| PEAK HR START TIME : | 730 <i>F</i> | MA         |         |            |            |         |          |             |         |          |          |         | TOTAL |
| PEAK HR VOL:         | 0            | 1          | 2       | 0          | 4          | 0       | 0        | 0           | 0       | 3        | 0        | 0       | 10    |
| PEAK HR FACTOR :     |              | 0.375      |         |            | 0.500      |         |          | 0.000       |         |          | 0.375    |         | 0.625 |

### **National Data & Surveying Services**

Project ID: 16-5420-001 Day: Thursday **HEAVY TRUCKS** 

Date: 6/9/2016

City: Granada Hills ΡМ

San Fernando Mission Blvd NS/EW Streets: Woodley Ave Woodley Ave San Fernando Mission Blvd NORTHBOUND SOUTHBOUND EASTBOUND WESTBOUND NL NT NR EL ΕT ER WL WT WR TOTAL SL ST SR LANES: 0 0 3 0 3:00 PM 3:15 PM 0 0 0 0 0 0 0 0 0 3 0 0 0 0 5 0 3:30 PM 0 0 0 0 3 3:45 PM 0 0 0 0 0 4:00 PM 0 0 0 0 3 4:15 PM 0 0 0 0 4:30 PM 0 0 0 0 0 0 0 0 0 3 4:45 PM 0 0 0 0 0 0 0 0 0 4 0 5:00 PM 0 0 0 0 0 0 0 1 0 1 4 0 0 0 0 5:15 PM 0 0 4 0 0 0 5:30 PM 0 0 0 0 0 0 0 0 0 0 2 5:45 PM 0 0 0 0 0 0 0 0 0 SR NL NT NR SL ST EL ΕT ER WL WT WR TOTAL TOTAL VOLUMES : 6 2 0 3 5 3 34 6 50.00% APPROACH %'s: 11.11% 66.67% 22.22% 20.00% 60.00% 20.00% 0.00% 50.00% 11.11% 55.56% 33.33% PEAK HR START TIME : 500 PM TOTAL PEAK HR VOL: 0 0 2 0 2 0 2 0 10 PEAK HR FACTOR: 0.750 0.750 0.500 0.625

### ATTACHMENT D

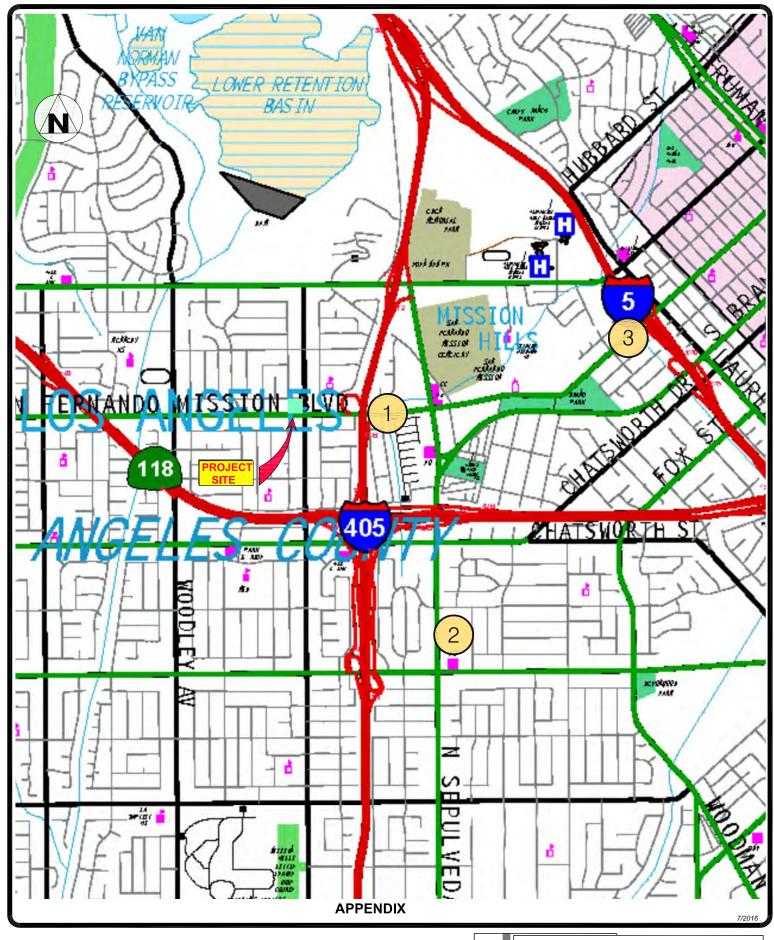
# RELATED PROEJCT LIST & TRIP GENERATION RELATED PROJECT LOCATION MAP

#### SF MISSION WOODLEY MIXED-USE

Related Projects

|    |                                   |                    |                          |              | <u> AN</u> | l Peak F   | <u>lour</u>  | <u>PM</u> | Peak F     | <u>lour</u>  |
|----|-----------------------------------|--------------------|--------------------------|--------------|------------|------------|--------------|-----------|------------|--------------|
| No | <u>Location</u>                   | <b>Description</b> |                          | <u>Daily</u> | <u>In</u>  | <u>Out</u> | <u>Total</u> | <u>In</u> | <u>Out</u> | <u>Total</u> |
| 1. | 15530 San Fernando Mission Blvd   | 28,929 SF          | Office                   | 319          | 36         | 6          | 42           | 7         | 36         | 43           |
| 2. | 10310 Sepulveda Blvd              | 158,240 SF         | Shopping Center (retail) | 6,757        | 94         | 58         | 152          | 282       | 305        | 587          |
| 3. | 15530 W San Fernando Mission Blvd | 191 Beds           | Senior Assisted Living   | 508          | 17         | 10         | 27           | 18        | 24         | 42           |

Page 1 of 1 7/19/2016



952 Manhattan Beach BI, #100, Manhattan Beach CA 90266 (310) 545-1235, (661) 799-8423, OTC@overlandtraffic.com

# ATTACHMENT E CMA WORKSHEETS



### **Level of Service Workheet**

(Circular 212 Method)



| I/S #:     | North-South Street:   | WOODL     | EY AVENUE                          |                            |                        | Yea                | r of Count                       | 2016                              | Amb                                | ient Grov        | vth: (%):                  | 2                      | Condu           | cted by:                       | L                          | _C                                 | Date:                            |                   | 7/17/2016                  | <b>,</b>               |
|------------|---|-----------|------------------------------------|----------------------------|------------------------|--------------------|----------------------------------|-----------------------------------|------------------------------------|------------------|----------------------------|------------------------|-----------------|--------------------------------|----------------------------|------------------------------------|----------------------------------|-------------------|----------------------------|------------------------|
| 1          | East-West Street:   | SAN FE    | RNANDO MI                          | SSION B                    | L                      | Proje              | ction Year                       | 2019                              |                                    | Pe               | ak Hour:                   | AM                     | Revie           | wed by:                        |                            |                                    | Project:                         | N                 | IIXED-US                   | E                      |
|            | No. o<br>posed Ø'ing: N/S-1, E/W-2 o<br>Turns: FREE-1, NRTOR-2 o<br>ATSAC-1 or ATSAC-     | or OLA-3? | NB 0<br>EB 0                       | SB<br>WB                   | 2<br>0<br>0<br>0<br>2  | NB<br>EB           | 0 SI<br>0 W                      |                                   | NB<br>EB                           | 0                | SB<br>WB                   | 2<br>0<br>0<br>0<br>2  | NB<br>EB        | 0                              | SB<br>WB                   | 2<br>0<br>0<br>0<br>2              | 2<br>0<br>0 NB 0 SB<br>0 EB 0 WB |                   | 2<br>0<br>0<br>0<br>2      |                        |
|            |   | Capacity  |                                    |                            | 0                      |                    |                                  | 0                                 |                                    |                  |                            | 0                      |                 |                                |                            | 0                                  |                                  |                   |                            | 0                      |
|            |   |           | EXISTI                             | NG CONDI                   | CONDITION              |                    | EXISTING PLUS PR                 |                                   | FUTURE CONDITION W/O PRO           |                  | OJECT                      | FUTUE                  | RE CONDIT       | ION W/ PR                      | OJECT                      | FUTURE W/ PROJECT W/ MIT           |                                  | IGATION           |                            |                        |
|            | MOVEMENT  |           | Volume                             | No. of<br>Lanes            | Lane<br>Volume         | Project<br>Traffic | Total<br>Volume                  | Lane<br>Volume                    | Added<br>Volume                    | Total<br>Volume  | No. of<br>Lanes            | Lane<br>Volume         | Added<br>Volume | Total<br>Volume                | No. of<br>Lanes            | Lane<br>Volume                     | Added<br>Volume                  | Total<br>Volume   | No. of<br>Lanes            | Lane<br>Volume         |
| NORTHBOUND | Left Left-Through Through-Right Right Left-Through-Right Left-Right                       |           | 57<br>123<br>64                    | 1<br>0<br>2<br>0<br>1<br>0 | <b>57</b><br>62<br>9   | -15<br>0           | 57<br>108<br>64                  | <b>57</b> 54 9                    | 0 0 3                              | 60<br>131<br>71  | 1<br>0<br>2<br>0<br>1<br>0 | 60<br>66<br>13         | -15<br>0        | 60<br>116<br>71                | 1<br>0<br>2<br>0<br>1<br>0 | 58<br>13                           | 0 0                              | 60<br>116<br>71   | 1<br>0<br>2<br>0<br>1<br>0 | 58<br>13               |
| SOUTHBOUND | Left  Left-Through  Through-Right  Right  Left-Through-Right  Left-Right                  |           | 39<br>312<br>38                    | 1<br>0<br>2<br>0<br>1<br>0 | 39<br><b>156</b><br>19 | 22<br>15<br>18     | 61<br>327<br>56                  | 61<br><b>164</b><br>40            | 3<br>0<br>0                        | 44<br>331<br>40  | 1<br>0<br>2<br>0<br>1<br>0 | 44<br>166<br>20        | 22<br>15<br>18  | 66<br>346<br>58                | 1<br>0<br>2<br>0<br>1<br>0 | 66<br>173<br>41                    | 0 0                              | 66<br>346<br>58   | 1<br>0<br>2<br>0<br>1<br>0 | 66<br>173<br>41        |
| EASTBOUND  | ☐ Left ☐ Left-Through ☐ Through ☐ Through-Right ☐ Right ☐ Left-Through-Right ☐ Left-Right |           | 39<br>215<br>53                    | 1<br>0<br>1<br>1<br>0<br>0 | 39<br><b>134</b><br>53 | -6<br>-3<br>0      | 33<br>212<br>53                  | 33<br><b>133</b><br>53            | 0<br>19<br>0                       | 41<br>247<br>56  | 1<br>0<br>1<br>1<br>0<br>0 | 41<br><b>152</b><br>56 | -6<br>-3<br>0   | 35<br>244<br>56                | 1<br>0<br>1<br>1<br>0<br>0 | 35<br><b>150</b><br>56             | 0 0                              | 35<br>244<br>56   | 1<br>0<br>1<br>1<br>0<br>0 | 35<br><b>150</b><br>56 |
| WESTBOUND  | ← Left  ← Left-Through  ← Through-Right  ← Right  ← Left-Through-Right  ← Left-Right      |           | 110<br>192<br>29                   | 1<br>0<br>1<br>1<br>0<br>0 | 110<br>111<br>29       | 0 0 -9             | 110<br>192<br>20                 | 110<br>106<br>20                  | 9                                  | 117<br>213<br>31 | 1<br>0<br>1<br>1<br>0<br>0 | 117<br>122<br>31       | 0 0 -9          | 117<br>213<br>22               | 1<br>0<br>1<br>1<br>0<br>0 | 117<br>118<br>22                   | 0 0 0                            | 117<br>213<br>22  | 1<br>0<br>1<br>1<br>0<br>0 | 117<br>118<br>22       |
|            | CRITICAL VOLUMES  |           | North-South:<br>East-West:<br>SUM: |                            | 244 East-l             |                    | rth-South:<br>East-West:<br>SUM: | 221<br>243<br>464                 | North-South:<br>East-West:<br>SUM: |                  | 226<br>269<br>495          | East-Wes               |                 | th-South:<br>ast-West:<br>SUM: |                            | North-South:<br>East-West:<br>SUM: |                                  | 233<br>267<br>500 |                            |                        |
| V/C        | VOLUME/CAPACITY (V/C<br>C LESS ATSAC/ATCS ADJU<br>LEVEL OF SERVIO                         | STMENT:   |                                    |                            | 0.305<br>0.205<br>A    |                    |                                  | 0.309<br><b>0.209</b><br><b>A</b> |                                    |                  |                            | 0.330<br>0.230<br>A    |                 |                                |                            | 0.333<br><b>0.233</b><br>A         |                                  |                   |                            | 0.333<br>0.233<br>A    |
|            |   | -MARKS.   |                                    |                            |                        |                    |                                  |                                   |                                    |                  |                            |                        |                 |                                |                            |                                    |                                  |                   |                            |                        |

REMARKS:

Version: 1i Beta; 8/4/2011

#### PROJECT IMPACT

Change in *v/c* due to project: 0.003
Significant impacted? NO

Δ*v/c* after mitigation: 0.003

Fully mitigated? N/A



### **Level of Service Workheet**

(Circular 212 Method)



| I/S #:   | North-South Street:                     | WOODL               | EY AVENUE |                 |                | Yea                | r of Count       | 2016              | Amb                                | ient Grov       | vth: (%):       | 2                 | Condu                              | cted by:        | ı               | _C                       | Date:           | Date: 7/17/2016                    |                 |                |  |
|--|---|---------------------|-----------|-----------------|----------------|--------------------|------------------|-------------------|------------------------------------|-----------------|-----------------|-------------------|------------------------------------|-----------------|-----------------|--------------------------|-----------------|------------------------------------|-----------------|----------------|--|
| 1  | East-West Street:                       | SAN FE              | RNANDO MI | SSION BI        | L              |                    | ction Year       |                   |                                    | Pe              | ak Hour:        | PM                |                                    | wed by:         |                 |                          | Project:        |                                    | MIXED-US        |                |  |
| No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? |   |                     |           | 2 0             |                |                    | ı                | 2 0               |                                    | -               |                 | 2<br>0            |                                    |                 |                 | 2                        |                 |                                    |                 |                |  |
| Right Turns: FREE-1, NRTOR-2 or OLA-3?               |   | NB 0<br>EB 0        | SB<br>WB  | 0               | NB<br>EB       | 0 SI               |                  | NB<br>EB          | 0                                  | SB<br>WB        | 0               | NB<br>EB          | 0                                  | SB<br>WB        | 0               | NB<br>EB                 | 0               | SB<br>WB                           | 0               |                |  |
|  | ATSAC-1 or ATSAC+<br>Override           | ATCS-2?<br>Capacity | LD 0      | W.D.            | 2 0            | LD                 | 0 10             | 2 0               | LD                                 | Ü               | 112             | 2 0               | LD                                 | Ü               | 112             | 2 0                      | LD.             | U                                  | 112             | 2              |  |
|  |   |                     | EXISTI    | NG CONDI        | TION           | EXIST              | EXISTING PLUS PI |                   | FUTURE CONDITION W/O PRO           |                 | ROJECT          | FUTUI             | RE CONDIT                          | ION W/ PROJECT  |                 | FUTURE W/ PROJECT W/ MIT |                 | IGATION                            |                 |                |  |
|  | MOVEMENT                                |                     | Volume    | No. of<br>Lanes | Lane<br>Volume | Project<br>Traffic | Total<br>Volume  | Lane<br>Volume    | Added<br>Volume                    | Total<br>Volume | No. of<br>Lanes | Lane<br>Volume    | Added<br>Volume                    | Total<br>Volume | No. of<br>Lanes | Lane<br>Volume           | Added<br>Volume | Total<br>Volume                    | No. of<br>Lanes | Lane<br>Volume |  |
| 9  | ↑ Left  Left-Through                    |                     | 111       | 1<br>0          | 111            | 4                  | 115              | 115               | 0                                  | 118             | 1<br>0          | 118               | 4                                  | 122             | 1<br>0          | 122                      | 0               | 122                                | 1<br>0          | 122            |  |
| NORTHBOUND   | ↑ Through  ↑ Through-Right              |                     | 408       | 2<br>0          | 204            | -6                 | 402              | 201               | 0                                  | 433             | 2<br>0          | 217               | -6                                 | 427             | 2<br>0          | 214                      | 0               | 427                                | 2<br>0          | 214            |  |
| ORTI   | <ul><li></li></ul>                      |                     | 121       | 1<br>0          | 76             | 0                  | 121              | 76                | 1                                  | 129             | 1<br>0          | 79                | 0                                  | 129             | 1<br>0          | 79                       | 0               | 129                                | 1<br>0          | 79             |  |
| اے   |   |                     | l         | 0               |                |                    |                  |                   |                                    |                 | 0               |                   |                                    |                 | 0               |                          |                 |                                    | 0               |                |  |
| <u>S</u>   | ↓ Left<br>↓ Left-Through                |                     | 55        | 1 0             | 55             | -24                | 31               | 31                | 1                                  | 59              | 1 0             | 59                | -24                                | 35              | 1 0             | 35                       | 0               | 35                                 | 1<br>0          | 35             |  |
| SOUTHBOUND   |   |                     | 179       | 2<br>0          | 90             | -17                | 162              | 81                | 0                                  | 190             | 2<br>0          | 95                | -17                                | 173             | 0               | 87                       | 0               | 173                                | 2<br>0          | 87             |  |
| SOUT   | <ul><li>  ✓ Right</li></ul>             |                     | 37        | 1<br>0<br>0     | 10             | -21                | 16               | 0                 | 0                                  | 39              | 1<br>0<br>0     | 10                | -21                                | 18              | 1<br>0<br>0     | 0                        | 0               | 18                                 | 1<br>0<br>0     | 0              |  |
|  | → Left → Left-Through                   |                     | 55        | 1<br>0          | 55             | -3                 | 52               | 52                | 0                                  | 58              | 1<br>0          | 58                | -3                                 | 55              | 1               | 55                       | 0               | 55                                 | 1<br>0          | 55             |  |
| EASTBOUND  | → Through  → Through                    |                     | 405       | 1<br>1          | 255            | 4                  | 409              | 257               | 32                                 | 462             | 1<br>1          | 287               | 4                                  | 466             | 1               | 289                      | 0               | 466                                | 1               | 289            |  |
| EASTI  | Right  Left-Through-Right               |                     | 105       | 0               | 105            | 0                  | 105              | 105               | 0                                  | 111             | 0               | 111               | 0                                  | 111             | 0               | 111                      | 0               | 111                                | 0               | 111            |  |
|  | -                                       |                     | <b>I</b>  | 0               |                |                    |                  |                   |                                    |                 | 0               |                   |                                    |                 | 0               |                          |                 |                                    | 0               |                |  |
| Q  |   |                     | 91        | 1 0             | 91             | 0                  | 91               | 91                | 3                                  | 100             | 1 0             | 100               | 0                                  | 100             | 1               | 100                      | 0               | 100                                | 1               | 100            |  |
| WESTBOUND  | ← Through<br>← Through-Right<br>← Right |                     | 319<br>42 | 1<br>1<br>0     | 181<br>42      | -1                 | 323<br>41        | 182<br>41         | 42                                 | 381<br>48       | 1<br>1<br>0     | 215<br>48         | 4                                  | 385<br>47       | 1<br>1<br>0     | 216<br>47                | 0               | 385<br>47                          | 1<br>1<br>0     | 216<br>47      |  |
| WES  | Right Left-Through-Right Left-Right     |                     | 42        | 0<br>0<br>0     | 42             | -1                 | 41               | 41                | 3                                  | 46              | 0<br>0          | 46                | -1                                 | 47              | 0<br>0<br>0     | 47                       | U               | 41                                 | 0<br>0          | 47             |  |
|  | CRITICAL VOLUMES                        |                     |           | East-West:      |                | 59                 |                  | 232<br>348<br>580 | North-South:<br>East-West:<br>SUM: |                 |                 | 276<br>387<br>663 | North-South:<br>East-West:<br>SUM: |                 | 389             | 389                      |                 | North-South:<br>East-West:<br>SUM: |                 |                |  |
|  | VOLUME/CAPACITY (V/C                    | RATIO:              |           |                 | 0.403          |                    |                  | 0.387             |                                    |                 |                 | 0.442             |                                    |                 |                 | 0.425                    |                 |                                    |                 | 0.425          |  |
| V/C  | C LESS ATSAC/ATCS ADJUS                 |                     |           |                 | 0.303          |                    |                  | 0.287             |                                    |                 |                 | 0.342             |                                    |                 |                 | 0.325                    |                 |                                    |                 | 0.325          |  |
|  | LEVEL OF SERVICE                        |                     |           |                 | Α              |                    |                  | Α                 |                                    |                 |                 | Α                 |                                    |                 |                 | Α                        |                 |                                    |                 | Α              |  |
|  | -                                       | MARKS:              |           |                 |                |                    |                  |                   |                                    |                 |                 |                   |                                    |                 |                 |                          |                 |                                    |                 |                |  |

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: -0.017
Significant impacted? NO

 $\Delta v/c$  after mitigation: -0.017 Fully mitigated? N/A